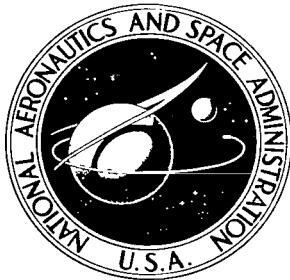


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HYPersonic FLOW PAST BLUNT CONES  
WITH CONSIDERATION OF THE EQUILIBRIUM  
PHYSICO CHEMICAL TRANSFORMATIONS

by V. V. Lunev, K. M. Magomedov, and V. G. Pavlov

*Computer Center of the Academy of Sciences USSR*  
Moscow, 1968

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## SYMBOLS

$\rho_\infty, a_\infty, V_\infty, M_\infty, H$	density, velocity of sound, velocity and Mach number of incident flow; values of $\rho_\infty, a_\infty$ correspond approximately to height $H$ of the Earth's atmosphere;
$\alpha$	Angle of attack;
$\theta_b$	Angle of half-aperture of the cone;
$x, r(y), \varphi \}$ $z, r(y), \varphi \}$	Cylindrical coordinate system, linear dimensions pertain to the radius of spherical blunting ( $R_1$ );
$x$	Calculated from the critical point;
$z$	Calculated from the plane of conjugation of the sphere and cone;
$u, v, w$	Velocity vector components with respect to the $x, r, \varphi$ , axes respectively, relative to the value $V_\infty$ ;
$p, i, \rho$	Pressure, enthalpy, and density relative correspondingly to the values $\rho_\infty, V_\infty^2, \rho_\infty$ ;
$\beta = \sqrt{M^2 - 1}, M$	Mach number;
$\eta = v/u, \zeta = w/\sqrt{u^2 + v^2}$	Tangents of the angle of inclination of the velocity vector to the $x$ axis and to the plane $\phi = \text{const.}$ , respectively;
$\omega = \frac{1}{r_B} \frac{\partial r_B}{\partial \varphi}, \xi = \frac{\partial r_B}{\partial x}$	Tangents of the angles of inclination of the shock wave $\gamma_w = \gamma(x, \varphi)$ to the $\phi$ and $x$ axes;
$\lambda = \frac{r - r_T}{r_N - r_B}$	Normal [0,1] distance in shock layer.
$C_x$	Wave drag coefficient when $\alpha = 0$ ;
$\bar{C}_T, \bar{C}_N, \bar{C}_m$	Coefficients of axial and normal forces and moment caused by the forces acting on conical part of the body (Formula (3));
$C'_T, C'_N$	Determined by Formula (4);

$C_T$ ,  $C_N$ ,  $C_m$

Total aerodynamic coefficients of blunt-cones (Formula (5));

b

Subscript characterizing parameters on the surface of the body;

w

Subscript characterizing parameters on the shock wave.

# HYPersonic FLOW PAST BLUNT CONES WITH CONSIDERATION OF THE EQUILIBRIUM PHYSICO CHEMICAL TRANSFORMATIONS

V. V. Lunev, K. M. Magomedov, and V. G. Pavlov

**ABSTRACT.** The results of calculations of the flow of air past blunt cones at an angle of attack  $\alpha = 0; 5$  and  $10^\circ$  with consideration of equilibrium physicochemical transformations occurring in it during flight at hypersonic velocities, and by an ideal gas with the adiabatic index of  $\gamma = 1.4$ , are presented in tabular form in this work.

The tables encompass a range of flight velocities of 3000 to 10,000 m/sec in the earth's atmosphere, and a range of Mach numbers of 4 to  $\infty$  for an ideal gas, with a range of half-cone angles of the cone from 0 to  $20^\circ$ , and they contain the distribution of parameters along the surface of the body, shock wave, and, in individual cross-sections, between the body and the shock wave.

The volume of tabular data presented herein with consideration of the possibilities of the hypersonic theory of similarity, the basic results of which are outlined briefly in the present work, is adequate for the determination of the characteristics of flow past cones with noses of arbitrary shape within the specified range of change of the parameters.

## 1. Introduction. Recommendations For The Use of Tabular Data for Other Conditions of Flow and Other Geometric Parameters.

The results of the calculations of hypersonic (for  $M_\infty \geq 4$ ) flow past cones during flight in the Earth's atmosphere are presented in this book. The tables presented herein differ from those published earlier [1] by greater volume and convenience, and, importantly, by consideration of the physicochemical transformations occurring in the air at high temperatures. These processes, taken into account here in equilibrium approximation, begin to have a considerable effect on the flow past such bodies when  $V_\infty \geq 3000$  m/sec ( $M_\infty \geq 10$ ).

At lower velocities, the effect of these processes, at least on the distribution of pressure around the body and on the shock wave, is insignificant,

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\*Numbers in the margin indicate pagination in the foreign text.

and therefore for  $M_\infty < 10$ , calculations were made only for an ideal gas with the adiabatic index of  $\gamma = 1.4$ . Since the data for high Mach numbers  $M_\infty$  for an ideal gas are also important, they, too, are included in the tables.

As we know, the perturbed zone during the hypersonic flow of air past a blunt body consists of the sub- and transonic regions of flow near the leading edge of the nose, and of the supersonic region, which is located on the flow from the former.

The supersonic region was calculated by the two-dimensional and the three-dimensional methods of characteristics in modifications presented in [2,3]. The sub- and transonic regions, including the boundary characteristic, or close to it, of the second set were calculated by the difference inverse method in which the field of flow is determined by the solution of the Cauchy problem for a shock wave of a given shape. This method is a modification of the Val'o-Laurin and Ferri method [4], and is explained in [2].

The accuracy of the calculations was checked by comparison of the results obtained at the various stages of the differential network, as well as by a check of the satisfaction of the integral laws of conservation. This analysis indicates that the accuracy of the tables is no worse than 1-2% for axisymmetrical flows ( $\alpha = 0$ ), and 1-3% for  $\alpha \neq 0$ .

Accordingly, four significant figures were used to check the numerical material with the help of the differences; then the last one was dropped without rounding off so that three significant figures are listed in the tables which correspond to their physical accuracy.

In considering the physicochemical transformations of the air, data on its thermodynamic properties were used in a specially select tabular form approximating the thermodynamic functions [5-7] with the required precision. Simple approximation of the equation of state was used in the sub- and transonic regions [2], which did not lower the overall accuracy of the calculations.

Calculations were made for three pairs of densities  $\rho_\infty$  and velocities of sound  $a_\infty$  of the incident flow, corresponding approximately to flight altitudes of  $H = 10, 30$  and  $60$  km. The dimensionless unknown functions of  $u, v, w, p, \rho, i$  used in this work are weak functions of density  $\rho_\infty$  and velocity of sound  $a_\infty$  (the last is generally changed very little in the Earth's atmosphere). Therefore there are quite sufficient data in the tables for their interpolation for all flow conditions.

As was already pointed out, the physicochemical transformations of air are assumed to be in equilibrium, which is valid for bodies of a dimension of about one meter at altitudes  $H \gtrsim 40$  km.

For high altitudes, nonequilibrium process can have a considerable effect on the parameters of the gas in the high-entropy boundary layer and on the

pressure distribution. Therefore, the data furnished for  $H \approx 60$  km should be regarded as academic and as reference data for interpolation to lower altitudes;

The basic material pertains to a very simple spherical nose. Certain variations are obtained for noses whose generatrix consists of a circle of two conjugate arcs (Figure 1) with the conjugate point in the supersonic region.

The recalculation of these data for cones with different noses can be accomplished on the basis of the hypersonic theory of similarity of flow around thin blunt bodies [8, 9], according to which / 7 the distribution of the dimensionless values  $p$ ,  $\rho$ ,  $i$ ,  $u$ ,  $v$  between the body and the shock wave, and the departure of the latter under identical flow conditions are independent of the shape of the nose in the similarity coordinates:

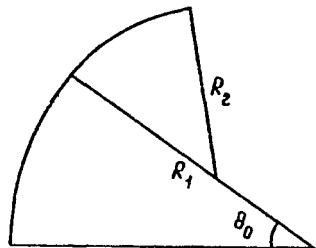


Figure 1. Shape of the Generatrix of the Nose ( $R_1$  and  $R_2$  are the

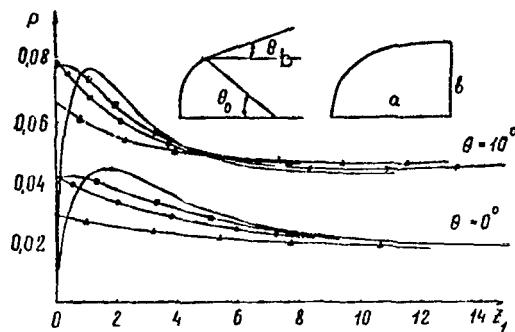
Radii of Arcs of Conjugate Circles,  
 $R = R_2/R_1$ )

where  $r_0$  is the radius of the midsection of the nose;  $C_{x_0}$  is the drag coefficient of the nose.

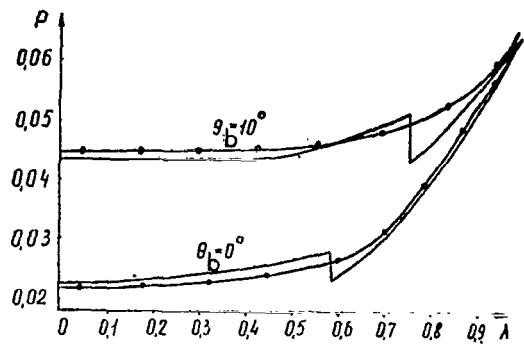
By way of confirmation, the pressure distributions, shapes of the shock waves, and profiles of the values between the body and the shock wave for cones with various noses are illustrated in Figure 2. As is evident, this, generally speaking, asymptotic law of similarity is quite accurate, even at a distance of the order of one to two nose diameters from the nose and even for the case  $\theta_0 = 30^\circ$ , where an internal compression jump occurs in the flow field.

We will notice that a calculation of the supersonic region of flow is now a much simpler and practicable problem than the calculation of sub- and transonic regions of flow near the nose, therefore the initial data for some characteristic of the second family, corresponding to flow around spheres which can be used for the calculation of the supersonic region, are presented in the tables. Hence, the calculations of the flow around elongated blunt bodies with various noses of more complex shape can be made by substitution on the basis of the above-stated law of similarity of the true nose by a nose with a spherical subsonic leading segment, which is extended in such a manner that a drag factor is obtained identical to the drag coefficient of the true nose. Such a procedure is quite effective and, as experience has shown, permits the rapid and accurate determination of the data for a wide class of at least flat noses with a drag coefficient less than that for the segment with a cone angle equal to the sonic angle on a sphere ( $\theta_{3w} = 35-45^\circ$ ).

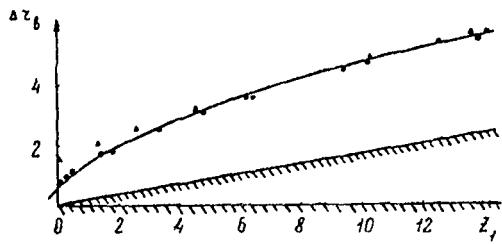
$$z_1 = \frac{z}{r_0} \sqrt{\frac{2}{C_{x_0}}}; \quad r_1 = \frac{r - r_0}{r_0} \sqrt{\frac{2}{C_{x_0}}},$$



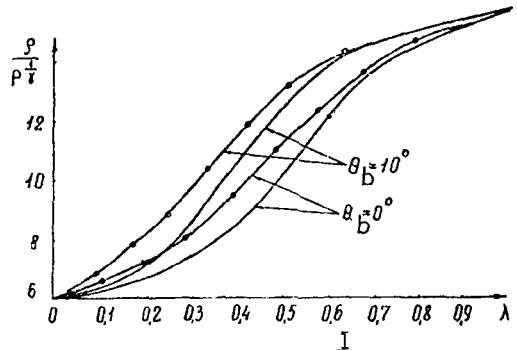
a. Pressure on Surface of Body



c. Pressure  $p$  between Body and Shock Wave in Cross-section  $z_1 = 9$ .



b. Head Shock Waves



d. The Function  $p/p^\gamma$  Between Body and Shock Wave in Cross-section  $z_1 = 9$ .

Figure 2. Distribution of Values in coordinates of Similarity for Cones and Cylinders with Various Noses: — Spherical Segment,  $\theta_0 = 30^\circ$  ( $C_x = 1.5$ ) (Calculations by V. F. Ivanov, [10]);  $\cdots$  Spherical Segment,  $\theta_0 = 80; 90^\circ$  ( $C_x \approx 0.88$ );  $\square$  Ellipsoid with Semiaxis ratio  $\delta = b/a = 1.5$ ;  $C_x \approx 1.08$  [1];  $\Delta\Delta$  Ellipsoid with Semiaxis ratio  $\delta = b/a = 0.5$ ;  $C_x = 0.55$  [1].

The drag coefficient of noses of various shapes can be found in many cases, for instance, from [10]. For spherical segments, there are the universal approximation formulas [2, 11]. For the determination of the drag of noses of sloping and smooth shape, the fact that the pressure distribution for the local slope angle of the surface of a stiff body is only a weak function of the shape [2] can also be used, and can be taken in the first approximation just the same as for a sphere.

The Tables contain data for cones with semiaperture angles  $\theta_b = 0, 5, 10, 15$ , and  $20^\circ$  and in many cases for  $\theta_b = 2^\circ.5$ . The dependence of the flow

parameters on  $\theta_b$  is so great (for instance, pressure  $p \sim \theta_b^2$ , and is a complex function of distance), that the step for  $\theta_b$  given in the Tables may be insufficient for direct interpolation. Therefore, to avoid significant errors such interpolations should be performed in the following similarity coordinates [8,12]:

$$\Delta p_\theta = \frac{p - p_\infty}{\tan^2 \theta_b}; \quad \eta_\theta = \frac{\eta}{\tan \theta_b}; \quad r_2 = \frac{r - r_0}{r_0} \sqrt{\frac{2}{C_{x_0}}} \tan \theta_b; \quad z_2 = z_1 \cdot \tan^2 \theta_b,$$

which greatly reduces the region of divergence of the curves (Figure 3). The density and enthalpy distributions, whose dependence on  $\theta_b$  is not identical in the various flow regions [9, 12] represent a somewhat more complex problem; in the coordinates  $r_2$ ,  $z_2$  for various  $\theta_b$ , the functions  $\rho$  and  $(i - i_\infty) \tan^{-2} \theta_b$  near the shock wave and  $\rho / \tan^2 \theta_b$ ,  $i / i_b$  near the surface of the body in the high-entropy layer are identical.

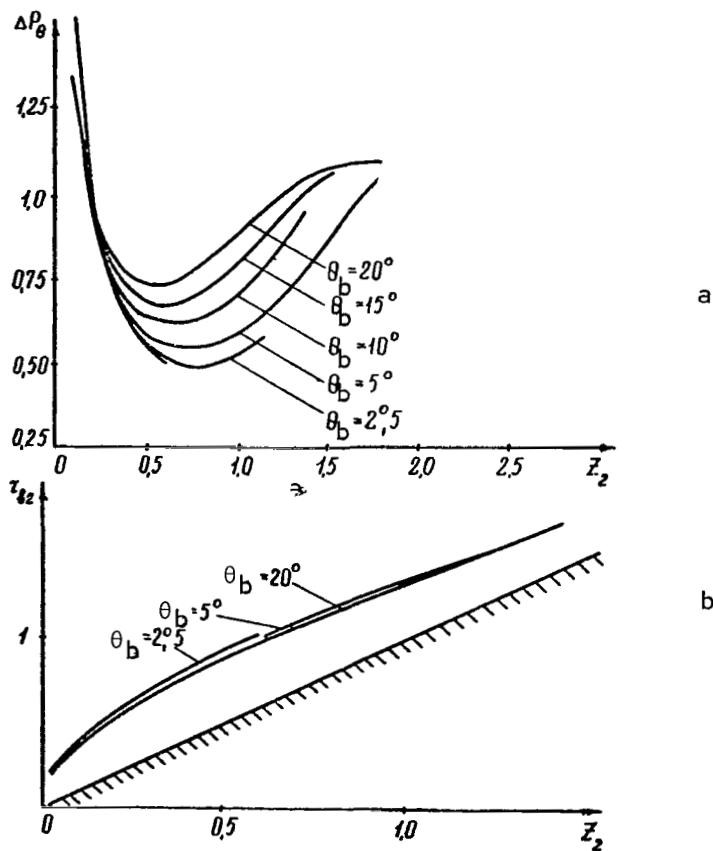


Figure 3. Pressure (a) and Shock Waves (b) in Similarity Coordinates for Various  $\theta_b$ ,  $M_\infty = \infty$ ;  $\gamma = 1.4$

We will notice that this law of similarity is asymptotic in nature, and the above-stated coordinates can be used approximately for  $z_2 \gtrsim 0.2$ . For the vicinity closer to the nose (having great length for small  $\theta_b$ ), the pressure differs but little from that on a cylinder, which should also be used for interpolation.

The dependence of the drag coefficients of blunt cones on  $\theta_b$  is also complex in nature, and therefore we should work with the relative drag of a side surface for interpolation:

$$F = \frac{C_x \cdot r^2 - C_{x_0} \cdot r_0^2}{C_{x_0} r_0^2},$$

where  $C_{x_0}$  is the drag wave coefficient of the nose;  $F$  is a rather universal function of variable  $z_2$  (Figure 4).

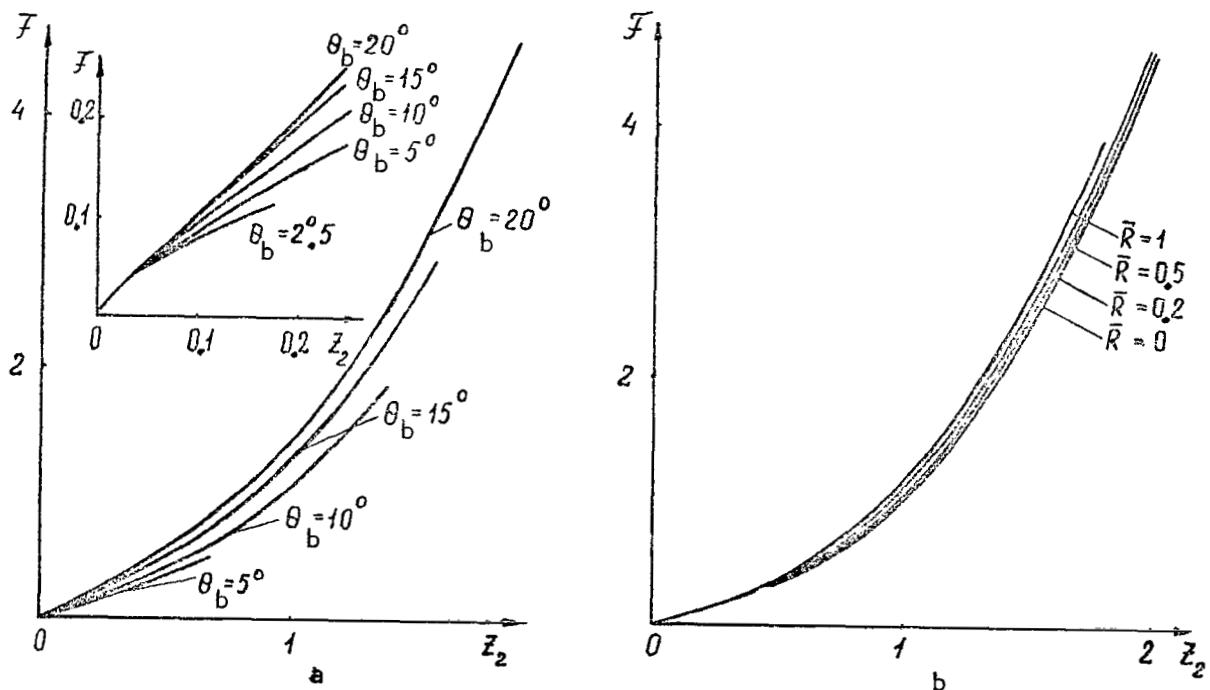


Figure 4: Relative Drag of Side Surface in Similarity Coordinates:  
 a. Spherical Blunting  $M_\infty = \infty$ ;  $\gamma = 1.4$ ; b. Blunting Consisting of Two Spheres,  
 $H = 30$  km;  $V_\infty = 7500$  m/sec;  $R = 0, 0.2, 0.5, 1$

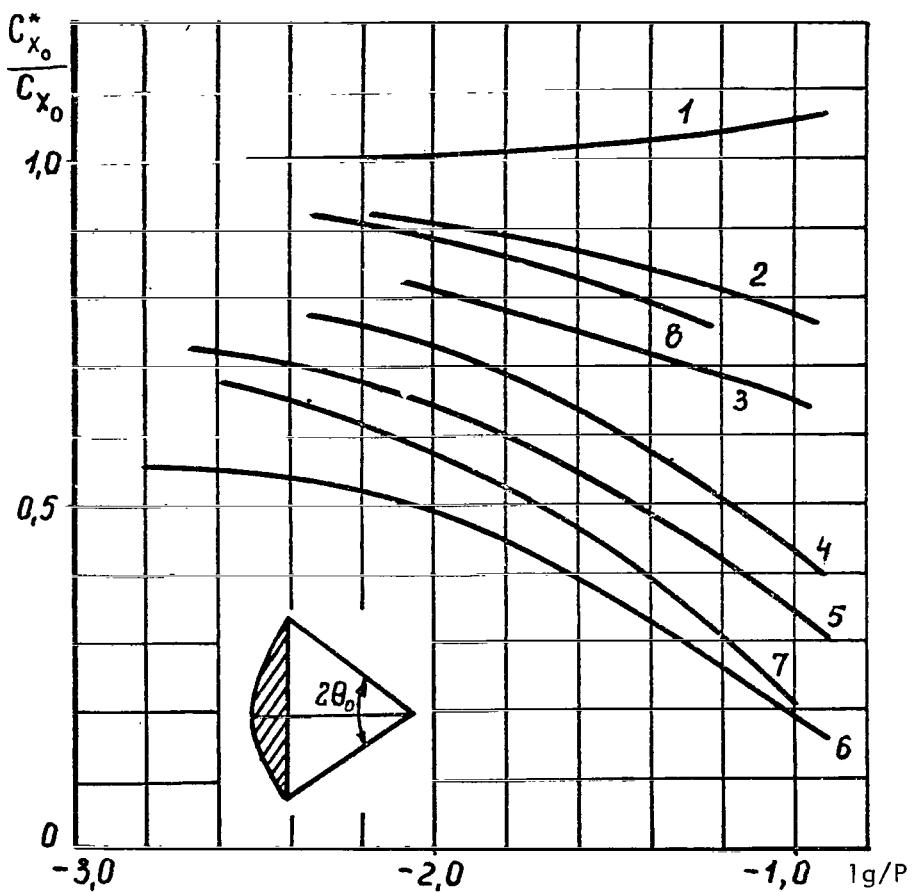


Figure 5. Ratio of the Effective Drag Factor Coefficient  $C_{x_0}^*$  to True  $C_{x_0}$ :

1.  $M_\infty = \infty$ ,  $\gamma = 1.4$ ,  $\theta_0 = 90^\circ$ ;
2.  $V_\infty = 4000$  m/sec,  $H = 30$  km,  $\theta_0 = 90^\circ$ ;
3.  $V_\infty = 5000$  m/sec,  $H = 60$  km,  $\theta_0 = 90^\circ$ ;
4.  $V_\infty = 7500$  m/sec,  $H = 30$  km,  $\theta_0 = 90^\circ$ ;
5.  $V_\infty = 7500$  m/sec,  $H = 60$  km,  $\theta_0 = 90^\circ$ ;
6.  $V_\infty = 10,000$  m/sec,  $H = 60$  km,  $\theta_0 = 90^\circ$ ;
7.  $V_\infty = 7500$  m/sec,  $H = 60$  km,  $\theta_0 = 45^\circ$ ;
8.  $V_\infty = 5000$  m/sec,  $H = 30$  km,  $\theta_0 = 90^\circ$

If the real properties of a gas are manifested only in the boundary or the so-called high entropy layer, which is formed by a gas passing through an intensive shock wave in the vicinity of the nose, and which therefore has a high temperature, then the dependence of the flow parameters on the flow conditions can be, during the recalculation of the data, taken into consideration by using the method of the effective drag coefficient [13], in accordance with which the pressure distribution along the body, the shape of the shock wave,  $p$ ,  $\rho$ ,  $i$ ,  $v$  outside of the high-entropy layer do not depend at the given Mach number  $M_\infty$  on the values  $\rho_\infty$  and  $V_\infty$  in the variables

$$z_1^* = z_1(C_{x_0}/C_{x_0}^*)^{1/2}; \quad r_1^* = r_1(C_{x_0}/C_{x_0}^*)^{1/2},$$

where the ratio  $C_x^*/C_{x_0}$  of the effective drag coefficient of the nose to the true value is a universal function of the flow conditions and of the local pressure, averaged with respect to the length of the cone (Figure 5).

At the same time, the direct interpolation of data for velocity  $V_\infty$  is permissible in many cases, if its range of change is not very great.

Tables of flow in a wide range of change of the angles of attack are extremely difficult and inconvenient to compile, therefore, we selected only one angle of attack,  $\alpha = 5^\circ$ , for a limited number of variants with respect to  $\theta_b$  and flow conditions for the compilation of the Tables.

For other conditions, it is possible to use the much more detailed data for  $\alpha = 0^\circ$  and the rather effective law of local blunt cones [14, 15], according to which when  $\alpha \approx \theta_b$  the distribution of parameters in the meridional band of a blunt cone, around which a flow passes at an angle of attack, coincides with the distribution of parameters for axisymmetrical flow around the cone with a half-cone angle  $\theta_m = \theta_b + \alpha \cos \phi$ , equal to the local angle of attack of the generatrix of the original cone under investigation. Data which verify this principle are given in Figure 6 and 7. This principle permits the application of the method of the effective drag coefficient and law of similarity for cones with  $\theta_b$  to the case of flow at a slight angle of attack, with result that the dimensionless functions

$$\Delta p_\theta = \frac{p - p_\infty}{\tan^2 \theta_M}; \quad \frac{\eta - \eta_b}{\tan \theta_M}; \quad \frac{r_B - r_b}{r_0} \tan \theta_M \sqrt{\frac{2}{C_{x_0}^*}}$$

universally, and  $\rho$ ,  $(i - i_\infty)/\tan^2 \theta_m$  outside of the high-entropy layer should be identical to the functions of the coordinates

$$z_{2M}^* = z_1^* \cdot \tan^2 \theta_M; \quad \lambda = \frac{r - r_b}{r_B - r_b}$$

independently of the streamline flow conditions and of angles  $\alpha$ ,  $\theta$ ,  $\phi$  (Figure 8).

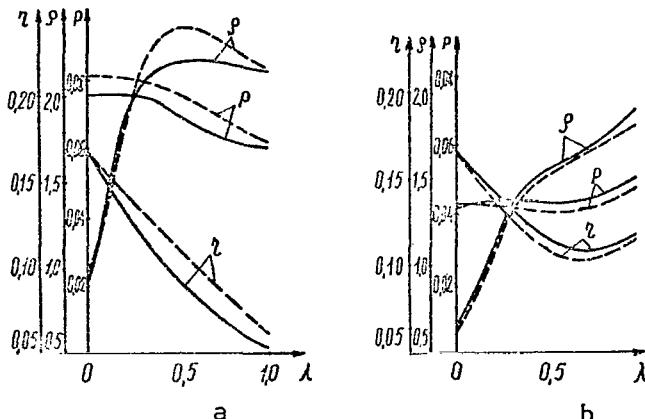


Figure 6. Pressure Distribution  $p$ , Density  $\rho$ , and parameter  $n$  between Body and Shockwave for  $z = 10$  ( $\theta_b = 9^\circ 30'$ ,  $M_\infty = 6$ ,  $\gamma = 1.4$ ):

— Precise numerical data; — — — According to the law of local cones;  
a.  $\phi = 0^\circ$ ,  $\alpha = 5^\circ$ ; b.  $\phi = \pi/2$ ,  $\alpha = 5^\circ$

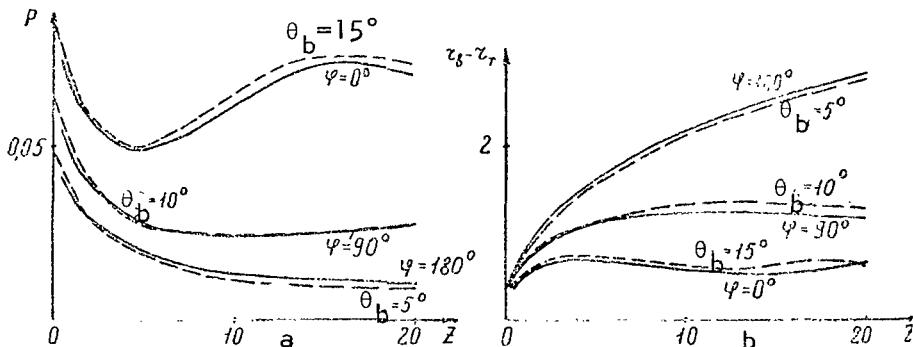


Figure 7. Pressure Distribution on Body (a) and Departure of Shock Wave from Body (b) ( $\theta_b = 10^\circ$ ,  $\alpha = 5^\circ$ ,  $V_\infty = 5000$  m/sec,  $H = 30$  km): — Precise numerical data; — — — According to the law of local cones.

These conclusions, naturally, do not pertain to the peripheral velocity component. In this regard the following semiempirical formula, which is a weak function of the flow conditions and angles  $\alpha$ ,  $\phi$ ,  $\theta$  when  $\alpha \leq 1/2 \theta_b$  (Figure 9) can be very beneficial:

$$\zeta_1(\bar{z}_2) = \Omega \left( \frac{\zeta}{\alpha \sin \varphi} + \frac{\alpha}{\theta} \cos \varphi \right), \quad \Omega = \rho_b u_b^2,$$

$$\bar{z}_2 = z_{2M}^* + \sqrt{\frac{2}{C_{x_0}^*} \frac{\tan^2 \theta_M}{\tan \theta}}.$$

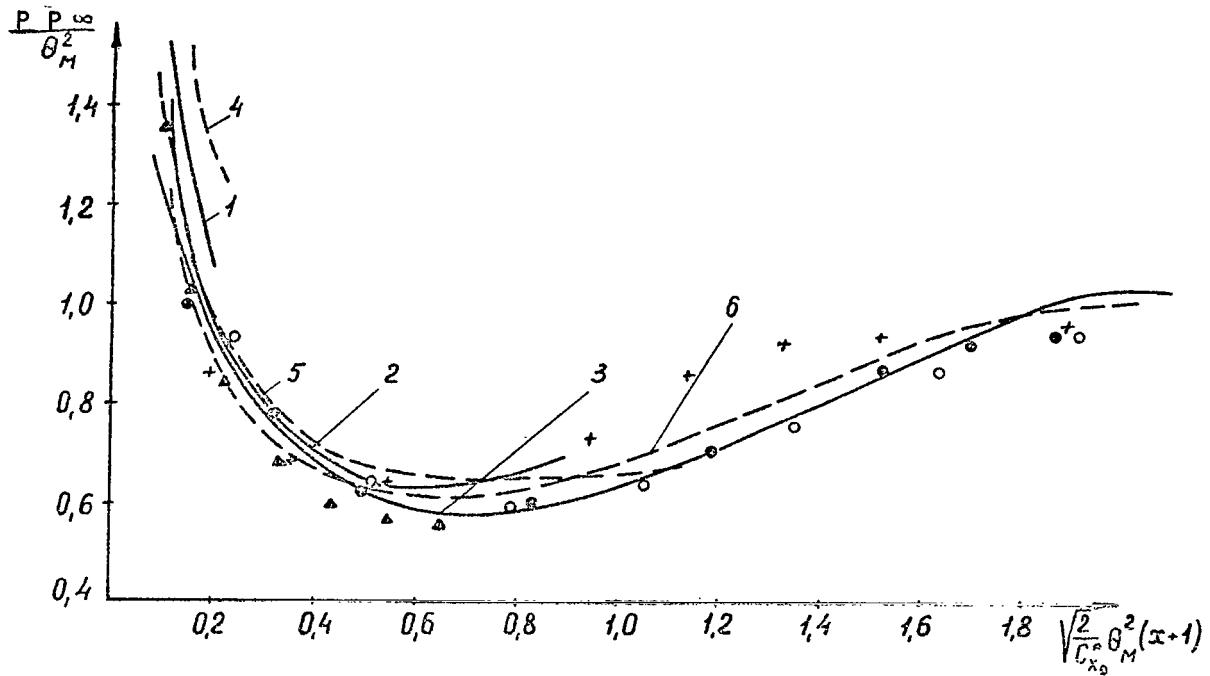


Figure 8. Pressure Distribution on Cone Along Various Generatrices in Similarity Coordinates:

...  $M_{\infty} = \infty$ ,  $\gamma = 1.4$ ,  $\theta_b = 9^{\circ}30'$ ,  $\alpha = 10^{\circ}$ ,  $\phi = 0^{\circ}$ ; 1 -  $M_{\infty} = \infty$ ,  $\gamma = 1.4$ ,  
 $\theta_b = 9^{\circ}30'$ ,  $\alpha = 5^{\circ}$ ,  $\phi = 180^{\circ}$ ; 2 -  $M_{\infty} = \infty$ ,  $\gamma = 1.4$ ,  $\theta_b = 9^{\circ}30'$ ,  $\alpha = 5^{\circ}$ ,  
 $\phi = 90^{\circ}$ ; 3 -  $M_{\infty} = \infty$ ,  $\gamma = 1.4$ ,  $\theta_b = 9^{\circ}30'$ ,  $\alpha = 5^{\circ}$ ,  $\phi = 0^{\circ}$ ; 4 -  $H = 60$  km;  
 $V_{\infty} = 7500$  m/sec,  $\theta_b = 9^{\circ}30'$ ,  $\alpha = 5^{\circ}$ ,  $\phi = 180^{\circ}$ ; 5 -  $H = 60$  km;  $V_{\infty} = 7500$  m/sec,  
 $\theta_b = 9^{\circ}30'$ ,  $\alpha = 5^{\circ}$ ,  $\phi = 90^{\circ}$ ; 6 -  $H = 60$  km;  $V_{\infty} = 7500$  m/sec,  $\theta_b = 9^{\circ}30'$ ,  
 $\alpha = 5^{\circ}$ ,  $\phi = 0^{\circ}$ ; ...  $H = 60$  km,  $V_{\infty} = 7500$  m/sec,  $\theta_b = 9^{\circ}30'$ ,  $\alpha = 10^{\circ}$ ,  $\phi = 0^{\circ}$ ; +++  
 $M_{\infty} = 23$ ,  $\gamma = 1.4$ ,  $\alpha = 0^{\circ}$ ,  $\theta_b = 20^{\circ}$ ; ▲▲▲  $M_{\infty} = \infty$ ,  $\gamma = 1.4$ ,  $\alpha = 0^{\circ}$ ,  $\theta_b = 5^{\circ}$

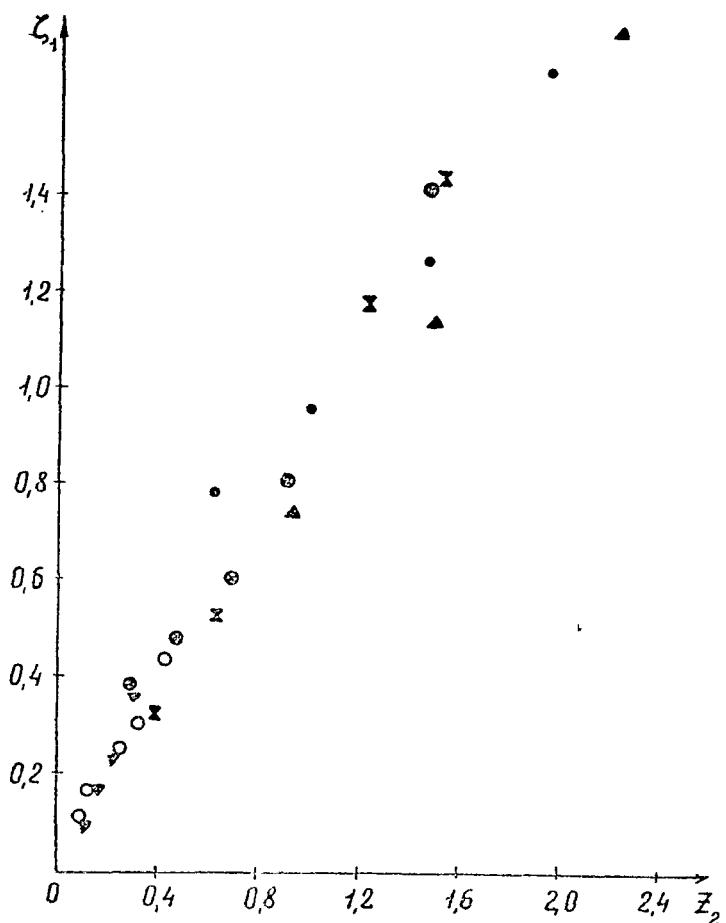


Figure 9: Distribution of Peripheral Velocity Component on Body Along Various Generatrices in Similarity Coordinates ( $\theta_b = 10^\circ$ ,  $\alpha = 5^\circ$ ):

$\bullet \bullet \bullet$   $\varphi = 13^\circ$ ;  $M_\infty = \infty$ ;  $\gamma = 1.4$ ;  $\circ \circ \circ$   $\varphi = 90^\circ$ ;  $M_\infty = \infty$ ;  $\gamma = 1.4$ ;  
 $\circ \circ \circ$   $\varphi = 162^\circ$ ;  $M_\infty = \infty$ ;  $\gamma = 1.4$ ;  $\Delta \Delta \Delta$   $\varphi = 13^\circ$ ;  $V_\infty = 7500 \text{ m/sec}$ ,  
 $H = 60 \text{ km}$ ;  $\times \times \times$   $\varphi = 90^\circ$ ;  $V_\infty = 7500 \text{ m/sec}$ ,  $H = 60 \text{ km}$ ;  $\nabla \nabla \nabla$   $\varphi =$   
 $= 162^\circ$ ;  $V_\infty = 7500 \text{ m/sec}$ ,  $H = 60 \text{ km}$

## II. Description of Tables

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### Parameters of Incident Flow. List of Variants

The calculations are furnished for an ideal gas with the heat capacity ratio  $\gamma = 1.4$  and for the conditions of incident flow in consideration of equilibrium physicochemical transformations:

1.  $\rho_{\infty} = 4.2 \cdot 10^{-2} \text{ kg} \cdot \text{sec}^2/\text{m}^4$   
 $a_{\infty} = 299 \text{ m/sec}$ , }  $H \approx 10 \text{ km}$ ,  
 $V_{\infty} = 5000 \text{ m/sec}$ ,  
 $V_{\infty} = 3000 \text{ m/sec}$ .
2.  $\rho_{\infty} = 1.8 \cdot 10^{-3} \text{ kg} \cdot \text{sec}^2/\text{m}^4$ , }  $H \approx 30 \text{ km}$ ,  
 $a_{\infty} = 304 \text{ m/sec}$ , }  
 $V_{\infty} = 7500 \text{ m/sec}$ ,  
 $V_{\infty} = 6000 \text{ m/sec}$ ,  
 $V_{\infty} = 5000 \text{ m/sec}$ ,  
 $V_{\infty} = 4000 \text{ m/sec}$ ,  
 $V_{\infty} = 3000 \text{ m/sec}$ .
3.  $\rho_{\infty} = 3.38 \cdot 10^{-5} \text{ kg} \cdot \text{sec}^2/\text{m}^4$ , }  $H \approx 60 \text{ km}$ ,  
 $a_{\infty} = 318 \text{ m/sec}$ , }  
 $V_{\infty} = 10000 \text{ m/sec}$ ,  
 $V_{\infty} = 7500 \text{ m/sec}$

The specified densities  $\rho_{\infty}$  and velocities of sound  $a_{\infty}$  occur at about the altitudes of 10, 30 and 60 km in the earth's atmosphere. Therefore, these conditions will be conditionally related in the following to flight altitudes of  $H = 10, 30$  and  $60 \text{ km}$ , respectively.

The calculations for a zero angle of attack were made for the following parameters, defining the flow, with consideration of equilibrium physicochemical transformations:

#### A. Spherical blunting:

$$\begin{aligned}
 H &= 60 \text{ km}, V_{\infty} = 10000 \text{ m/sec}, \theta_b = 20; 15; 10; 5; 0^\circ; \\
 &\quad V_{\infty} = 7500 \text{ m/sec}, \theta_b = 20; 15; 10; 5; 0^\circ; \\
 H &= 30 \text{ km}, V_{\infty} = 7500 \text{ m/sec}, \theta_b = 20; 15; 10; 5; 2.5; 0^\circ; \\
 &\quad V_{\infty} = 6000 \text{ m/sec}, \theta_b = 20; 15; 10; 5; 2.5; 0^\circ; \\
 &\quad V_{\infty} = 5000 \text{ m/sec}, \theta_b = 20; 15; 10; 5; 2.5; 0^\circ;
 \end{aligned}$$

$$H = 30 \text{ km}, V_{\infty} = 4000 \text{ m/sec}, \theta_b = 20; 15; 10; 5; 2.5; 0^\circ;$$

$$V_{\infty} = 3000 \text{ m/sec. } \theta_b = 20; 15; 10; 5; 2.5; 0^\circ;$$

$$H = 10 \text{ km}, V_{\infty} = 5000 \text{ m/sec}, \theta_b = 20; 15; 10; 5; 0^\circ$$

$$V_{\infty} = 3000 \text{ m/sec, } \theta_b = 20; 15; 10; 5; 0^\circ.$$

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### B. Blunting With A Generatrix of Two Arcs (Figure 1):

$$H = 30 \text{ km}, V_{\infty} = 7500 \text{ m/sec, } \theta_b = 10^\circ,$$

$$\bar{R} = 0; 0.2; 0.5, \theta_0 = 38^\circ 15';$$

$$H = 30 \text{ km}, V_{\infty} = 5000 \text{ m/sec, } \theta_b = 20; 15; 10; 5; 0^\circ,$$

$$\bar{R} = 0, \theta_0 = 39^\circ 30'.$$

For an ideal gas with  $\gamma = 1.4$ , the following variants are presented:

$$M_{\infty} = \infty; 10; 6; 4, \theta_b = 20; 15; 10; 5; 2.5; 0^\circ,$$

$$M_{\infty} = 23; 15, \theta_b = 20; 15; 10; 5; 0^\circ.$$

The following variants are given for an angle of attack:

- with consideration of equilibrium physicochemical transformations:

$$V_{\infty} = 7500 \text{ m/sec, } H = 30 \text{ km, } \theta_b = 15^\circ, \alpha = 5^\circ,$$
$$\theta_b = 5^\circ, \alpha = 5^\circ;$$

$$V_{\infty} = 5000 \text{ m/sec, } H = 30 \text{ km, } \theta_b = 15^\circ, \alpha = 5^\circ,$$
$$\theta_b = 10^\circ, \alpha = 5^\circ,$$
$$\theta_b = 5^\circ, \alpha = 5^\circ;$$

-ideal gas with  $\gamma = 1.4$ :

$$M_{\infty} = \infty, \theta_b = 15^\circ, \alpha = 5^\circ,$$
$$\theta_b = 10^\circ, \alpha = 5^\circ;$$

$$M_{\infty} = 6, \theta_b = 10^\circ, \alpha = 10^\circ,$$
$$\theta_b = 10^\circ, \alpha = 5^\circ,$$
$$\theta_b = 5^\circ, \alpha = 5^\circ;$$

$$M_{\infty} = 4, \theta_b = 15^\circ, \alpha = 5^\circ,$$
$$\theta_b = 10^\circ, \alpha = 5^\circ.$$

## Tables of Axisymmetric Flow

The values of the coordinates  $x$ ,  $y$ , the tangent of the inclination angle of velocity  $\eta$  to the  $x$  axis, pressure  $p$ , and enthalpy  $i$  on the initial characteristics are listed in Table 1.

The values of pressure  $p_b$ , enthalpy  $i_b$ , density  $\rho_b$ , coefficient of wave drag  $C_x$  on the surface of a sphere as functions of the central angle  $\theta$  (for an ideal gas  $p_b$ ,  $i_b$ ,  $C_x$ ) are given in Tables 2 and 3.

The values of the coordinates  $x_w$ ,  $y_w$ , tangent of the inclination angle to the  $x$  axis of shock wave  $\xi$ , density  $\rho_w$ , enthalpy  $i_w$ , tangent of the slope of velocity  $\eta_w$  to the  $x$  axis, values of  $\beta_w$  on the shock wave near the spherical blunting up to  $x = 1$  (for an ideal gas  $x_w$ ,  $y_w$ ,  $\xi$ ,  $\rho_w$ ) are furnished in Tables 4 and 5. /19

We will notice that when  $\theta < \theta_{son}$ , where  $\theta_{son}$  is the central angle of the sonic point on the surface of the sphere, the values of the coefficients of wave drag have only a formal character since during flow around a spherical segment with the angle  $\theta < \theta_{son}$ , a rearrangement of the entire flow occurs, and it will not be equivalent to the flow near the sphere.

Tables 6 through 17 give the same parameters on the shock wave as do Tables 4 and 5, but for  $x \geq 1$ .

The parameters on the side surface of a cone (enthalpy  $i_b$ , density  $\rho_b$ , pressure  $p_b$ , parameter  $\beta_b$ , coefficient of wave drag  $C_x$ , for an ideal gas -  $i_b$ ,  $p_b$ ,  $C_x$ ) are given in Tables 18 through 29.

Tables 30 through 41 give the values in the flow field between the surface of the body and the shock wave for  $\eta$ ,  $i$ ,  $\rho$ ,  $p$ ,  $\beta$  (for an ideal gas  $\eta$ ,  $i$ ,  $p$ ) in the cross-sections  $x = \text{const.}$

All variants are arranged for each  $\theta_b = 20, 15, 10, 5$ , and  $0^\circ$  in the order of diminishing velocity  $V_\infty$  or Mach number  $M_\infty$ . For an ideal gas, the number of gas dynamic parameters furnished is reduced, since these parameters are easily determined either from the equation of state, or from the relations on the compression jump.

## Tables of Hypersonic Flow Around Blunted Cones at an Angle of Attack

The results of calculations of hypersonic flow around blunted cones at an angle of attack  $\alpha = 5^\circ$  are given in Tables 42 through 86, with the exception of one variant, in the order of diminishing  $M_\infty$  or  $V_\infty$ .

The distribution pressure of the  $p_b$  and of the parameter of the peripheral velocity component  $\xi_b$  on the surface of the body is given in Tables 42 through 53 as functions of  $z$  and  $\phi$ .

The other gas dynamic parameters (density  $\rho$ , enthalpy  $i$ , velocity  $V$ , and  $\beta$ ) can be found as a function of pressure  $p_b$  from the condition of isoentropic flow on the body for identical values of the parameters of the incident flow. In the practical sense, it is convenient to do this as follows: for a given value of  $p_b(z, \phi)$  in the corresponding variant with respect to  $M_\infty$  (or  $V_\infty$ ,  $H$ ) from Tables 18-29 (for  $\alpha = 0$ , it is necessary to use the  $\theta_b$  closest to  $\theta_b + \alpha \cos \phi$ ) and to find, by interpolation, the necessary gasdynamic functions.

The geometric parameters of the shockwave  $r_w = R(z, \phi)$  and  $\xi(z, \phi)$  are given /20 in Tables 54 through 65. The values of the parameter  $\omega = \frac{1}{R} \frac{\partial R}{\partial \phi}$  can be computed from the tabular data:

$$\omega_j = \frac{R_{j+1} - R_{j-1}}{2R_j \Delta \varphi} \quad (\Delta \varphi = \frac{\pi}{10}).$$

The gas dynamic parameters are expressed through  $\xi$  and  $\omega$ :

$$\left. \begin{aligned} \eta &= \frac{\tan \alpha \cos \varphi + (1-k)Q}{1 - (1-k)\xi Q} & \left( Q = \frac{\xi + \tan \alpha (\cos \varphi + \omega \sin \varphi)}{1 + \xi^2 + \omega^2} \right); \\ \xi &= \frac{\tan \alpha \sin \varphi - (1-k)\omega Q}{\sqrt{1 + \eta^2 [1 - (1-k)\xi Q]}}; & V_{n\infty}^2 = \frac{Q^2 (1 + \xi^2 + \omega^2)}{1 + \tan^2 \alpha}; \end{aligned} \right\} \quad (1)$$

$$p = p_\infty + (1-k)V_{n\infty}^2; \quad i = i_\infty + (1-k^2) \frac{V_{n\infty}^2}{2}; \quad k = \frac{1}{\rho} = f(p, i). \quad (2)$$

To avoid solving equation (2) relative to  $p$ ,  $i$ , and  $k$  for the case of flows of equilibrium dissociating air, Tables 6 through 17 can be used for  $\alpha = 0$  and for the same  $V_{\infty}$  and  $H$ .  $V_{n\infty}^2$  is calculated on the basis of the latter from Formula (1). The values  $p$ ,  $i$ ,  $\rho$ ,  $\beta$  are found from Table 4 through 17 as functions of

$$\xi_{\alpha=0} = \frac{V_{n\infty}}{\sqrt{1-V_{n\infty}^2}}.$$

Further,  $\eta$  and  $\zeta$  can be calculated from Formula (1).

The profiles of the gas dynamic parameters  $\eta$ ,  $p$ ,  $i$ ,  $\zeta$  between the body and the shockwave for three values of  $\phi$  (0, 90 and 180°) for various  $z$  are given in Tables 66 through 77. For other values of  $z$  and  $\phi$ , and also of the flow conditions, less accurate profiles can be found on the basis of the law of local cones from Tables 30 through 41. Here, to improve the precision, we recommend that the functions themselves not be calculated, but rather the expressions of  $f - f_b$ , the form  $\frac{f_w - f_b}{f_w}$  where  $f_b$  and  $f_w$  are found from Tables 42 through 53 and 54 through 65.

Tables 78 through 86 give the parameters  $(\bar{C}_T, \bar{C}_N, \bar{C}_m, C'_T, C'_N)$ , which are required for the computation of the total aerodynamic coefficients of blunted cones. The values of  $(\bar{C}_T, \bar{C}_N, \bar{C}_m, C'_T, C'_N)$ , due to the forces acting on the side surface are computed from Formula 3.

$$\left. \begin{aligned} \bar{C}_T &= \frac{4}{\pi r_b^2} \int_0^z r r_b' dz \int_0^\pi p d\varphi_m \\ \bar{C}_N &= \frac{4}{\pi r_b^2} \int_0^z r dz \int_0^\pi p \cos \varphi d\varphi; \end{aligned} \right\} \quad (3)$$

$$\left. \begin{aligned} \bar{C}_m &= \frac{4}{\pi r_b^2} \int_0^z r(z + rr_b') dz \int_0^\pi p \cos \varphi d\varphi; \\ C'_T &= \frac{1}{\pi} \int_0^\pi p d\varphi; \quad C'_N &= \frac{1}{\pi} \int_0^\pi p \cos \varphi d\varphi. \end{aligned} \right\} \quad (4)$$

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The total aerodynamic coefficients (coefficients of axial and normal force  $C_T$  and  $C_N$  and coefficient of the moment  $C_m$ ) for blunt cones are defined by the formula

$$\left. \begin{aligned} C_T &= \bar{C}_T + \frac{r_0^2}{r_b^2} \left[ C_{T0} - 2p_\infty \frac{r_T^2 - r_0^2}{r_0^2} \right] & \left( p_\infty = \frac{1}{\gamma M_\infty^2}, r_0 = r_b(0) \right); \\ C_N &= \bar{C}_N + \frac{r_0^2}{r_b^2} C_{N0}; & C_m = \bar{C}_m + \frac{r_0^2}{r_b^2} \frac{b}{z} C_{m0}. \end{aligned} \right\} \quad (5)$$

In Formula (5), the moment is viewed relative to the point  $z = r = 0$  in the plane of junction of the cone and blunting. The distance between the critical point and the plane  $z = 0$  for a smooth spherical blunting  $b = 1 - \sin \theta_b$  is denoted through  $b$ . The values of the aerodynamic coefficients of blunting in the shape of a spherical segment with a central half-angle  $\omega$  can be calculated from the relations

$$\begin{aligned} C_{T0} &= p'_0 \tilde{C}_T - \frac{2}{\gamma M_\infty^2} & \left( \tilde{C}_T = \sum_{i=0}^3 A_{2i} \sin^{2i} \omega \right); \\ C_{N0} &= p'_0 \tilde{C}_N & \left( \tilde{C}_N = \sum_{i=1}^3 B_{2i} \sin^{2i} \omega \right); \\ C_{m0} &= \frac{\cos \omega}{1 - \cos \omega} C_{N0}. \end{aligned}$$

The coefficients  $A_{2i}$  and  $B_{2i}$  for various flow conditions are listed in Table I.

The stagnation pressure at the critical point  $p'_0 \approx 1 - \frac{k_0}{2} + \frac{1}{\gamma M_\infty^2}$ , where the values of compression  $k_0$  beyond the straight jump are listed in Table II.

Considerations based on the theory of similarity, and practical calculations have shown that the values of  $\bar{C}_T$ ,  $\bar{C}_N$ ,  $\bar{C}_m$  listed in Tables 78 through 86 /22/ can be used for determining the aerodynamic characteristics by Formula (5) for other blunt shapes if they have the same drag coefficient  $C_x$  (or  $C_{T0}$ ), as the spherical segment, and if the length of their cones is greater than three or four calibers.

Table I

$\alpha$ , deg.	$A_0$	$A_2$	$A_4$	$A_6$	$B_2$	$B_4$	$B_6$
$\gamma = 1,4, M_\infty = 4$							
0	2,000	-1,120	0,132	0	0,0000	0,0000	0
5	1,983	-1,102	0,127	0	0,0970	-0,0226	0
10	1,933	-1,047	0,133	0	0,189	-0,0428	0
15	1,852	-0,959	0,0920	0	0,273	-0,0583	0
$\gamma = 1,4, M_\infty = 6$							
0	2,000	-1,174	0,158	0	0,000	0,0000	0
5	1,982	-1,153	0,152	0	0,102	-0,0270	0
10	1,930	-1,093	0,135	0	0,198	-0,0511	0
15	1,845	-0,998	0,110	0	0,286	-0,0696	0
$\gamma = 1,4, M_\infty = \infty$							
0	2,000	-1,217	0,178	0	0,000	0,0000	0
5	1,982	-1,195	0,171	0	0,105	-0,0305	0
10	1,927	-1,131	0,152	0	0,205	-0,0577	0
15	1,839	-1,029	0,124	0	0,295	-0,0786	0
$V_\infty \geq 3000 \text{ m/sec}$							
0	2,000	-1,170	0,0000	0,112	0,000	0,0000	0,0000
5	1,979	-1,157	0,0101	0,104	0,102	-0,0009	-0,0283
10	1,917	-1,115	0,0376	0,0792	0,200	-0,0066	-0,0501
15	1,817	-1,014	0,0756	0,0448	0,292	-0,0203	-0,0605

Table II

$V$ , m/sec	$H$ , km					
	10	20	30	40	50	60
	$\rho_\infty$ , g/cm <sup>3</sup>					
	$4,13 \cdot 10^{-4}$	$5,45 \cdot 10^{-5}$	$1,79 \cdot 10^{-5}$	$4,00 \cdot 10^{-6}$	$1,08 \cdot 10^{-6}$	$3,32 \cdot 10^{-7}$
	$a_\infty$ , m/sec					
	299	295	304	322	332	319
1	2	3	4	5	6	7
2 000	0,1606	0,1602	0,1609	0,1625	0,163	0,161
2 500	0,1136	0,1423	0,1418	0,1387	0,136	0,133
3 000	0,1278	0,1241	0,1201	0,1160	0,112	0,106
3 500	0,1151	0,1108	0,1059	0,1014	0,0971	0,0936
4 000	0,1076	0,1030	0,0936	0,0916	0,0819	0,0806
4 500	0,1040	0,1000	0,0965	0,0936	0,0915	0,0884
5 000	0,1008	0,0966	0,0927	0,0886	0,0850	0,0819
5 500	-	0,0916	0,0869	0,0825	0,0786	0,0754
6 000	-	0,0868	0,0814	0,0769	0,0732	0,0699
6 500	-	0,0825	0,0770	0,0725	0,0688	0,0655
7 000	-	0,0790	0,0736	0,0691	0,0652	0,0621
7 500	-	0,0763	0,0710	0,0666	0,0627	0,0597
8 000	-	0,0744	0,0694	0,0646	0,0610	0,0582
8 500	-	0,0735	0,0679	0,0639	0,0602	0,0576
9 000	-	0,0732	0,0680	0,0640	0,0610	0,0589
9 500	-	0,0734	0,0691	0,0660	0,0637	0,0618
10 000	-	0,0748	0,0712	0,0681	0,0659	0,0632

Tr. Note: Commas indicate decimal points.

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**TABLES**

**BASIC GAS DYNAMIC PARAMETERS OF FLOW  
AROUND SPHERICALLY BLUNTED CONES**

Table 1

$x$	$y$	$\eta$	$i$	$p$	$x$	$y$	$\eta$	$i$	$p$
$M_{\infty} = \infty, \gamma = 1.4$									
0.283	0.697	1.01	0.400	0.420	0.272	0.685	1.05	0.413	0.440
0.282	0.697	1.01	0.399	0.432	0.264	0.687	1.05	0.413	0.450
0.274	0.700	1.01	0.399	0.442	0.257	0.690	1.04	0.413	0.460
0.266	0.702	1.01	0.399	0.452	0.248	0.693	1.04	0.412	0.469
0.258	0.705	1.01	0.398	0.462	0.240	0.696	1.03	0.411	0.479
0.250	0.707	1.00	0.397	0.471	0.232	0.699	1.03	0.410	0.489
0.242	0.709	1.00	0.396	0.480	0.223	0.702	1.02	0.408	0.498
0.234	0.712	1.00	0.394	0.489	0.214	0.705	1.01	0.407	0.507
0.226	0.714	0.999	0.393	0.498	0.197	0.710	1.00	0.403	0.525
0.218	0.716	0.995	0.391	0.506	0.188	0.712	1.00	0.401	0.533
0.210	0.717	0.993	0.389	0.514	0.180	0.714	0.995	0.399	0.541
0.203	0.719	0.989	0.387	0.522	0.171	0.716	0.990	0.396	0.549
0.195	0.721	0.986	0.385	0.530	0.163	0.718	0.984	0.394	0.556
0.187	0.722	0.982	0.383	0.537	0.155	0.720	0.979	0.392	0.564
0.179	0.724	0.979	0.381	0.544	0.146	0.721	0.974	0.389	0.571
0.171	0.725	0.976	0.379	0.552	0.138	0.722	0.969	0.386	0.577
0.163	0.726	0.972	0.376	0.558	0.122	0.725	0.960	0.381	0.590
0.155	0.727	0.969	0.373	0.565	0.114	0.725	0.954	0.378	0.595
0.147	0.728	0.965	0.371	0.572	0.106	0.726	0.949	0.375	0.601
0.139	0.728	0.961	0.368	0.578	0.0982	0.727	0.944	0.372	0.606
0.131	0.729	0.957	0.365	0.584	0.0904	0.727	0.939	0.369	0.610
0.123	0.729	0.953	0.362	0.589	0.0827	0.728	0.933	0.366	0.614
0.115	0.730	0.949	0.359	0.595	0.0810	0.728	0.932	0.365	0.615
$M_{\infty} = 23, \gamma = 1.4$									
0.279	0.690	1.04	0.407	0.433	0.266	0.677	1.08	0.430	0.457
0.272	0.692	1.04	0.406	0.442	0.259	0.680	1.07	0.429	0.467
0.255	0.695	1.03	0.406	0.452	0.249	0.684	1.06	0.428	0.478
0.257	0.698	1.03	0.405	0.462	0.240	0.688	1.05	0.427	0.488
0.249	0.700	1.03	0.404	0.471	0.230	0.692	1.04	0.425	0.499
0.241	0.703	1.02	0.403	0.481	0.221	0.696	1.03	0.424	0.508
0.232	0.705	1.02	0.402	0.490	0.211	0.700	1.02	0.422	0.518
0.224	0.708	1.01	0.400	0.499	0.202	0.703	1.01	0.420	0.527
0.207	0.713	1.00	0.397	0.517	0.193	0.706	1.00	0.418	0.535
0.199	0.715	1.00	0.395	0.525	0.184	0.709	1.00	0.416	0.544
0.190	0.717	0.997	0.393	0.533	0.174	0.711	0.993	0.413	0.552
0.182	0.719	0.992	0.390	0.541	0.166	0.714	0.985	0.411	0.559
0.173	0.721	0.988	0.388	0.549	0.157	0.716	0.979	0.408	0.567
0.165	0.722	0.983	0.386	0.556	0.148	0.718	0.972	0.406	0.574
0.157	0.723	0.979	0.383	0.563	0.138	0.720	0.966	0.403	0.580
0.141	0.726	0.970	0.378	0.577	0.131	0.721	0.959	0.400	0.587
0.133	0.727	0.963	0.375	0.583	0.122	0.723	0.953	0.398	0.593
0.125	0.727	0.962	0.372	0.589	0.114	0.724	0.947	0.395	0.598
0.117	0.728	0.957	0.369	0.595	0.106	0.725	0.941	0.392	0.603
0.109	0.729	0.952	0.366	0.600	0.0979	0.726	0.935	0.389	0.608
0.101	0.729	0.948	0.363	0.603	0.0898	0.727	0.929	0.385	0.613
0.0965	0.729	0.945	0.362	0.603	0.0818	0.728	0.922	0.383	0.617
0.0877	0.729	0.942	0.359	0.614	0.0765	0.728	0.919	0.381	0.619
$M_{\infty} = 15, \gamma = 1.4$									
$M_{\infty} = 10, \gamma = 1.4$									

Table 1 Continued

$x$	$y$	$\eta$	$i$	$p$	$x$	$y$	$\eta$	$i$	$p$
<b><math>M_\infty = 6, \gamma = 1.4</math></b>									
0.281	0.689	1.04	0.462	0.449	0.195	0.598	1.34	0.464	0.547
0.273	0.691	1.04	0.463	0.459	0.186	0.599	1.33	0.457	0.561
0.266	0.695	1.03	0.463	0.469	0.178	0.600	1.33	0.448	0.573
0.258	0.698	1.03	0.464	0.479	0.171	0.599	1.33	0.441	0.585
0.249	0.702	1.02	0.463	0.489	0.164	0.598	1.33	0.434	0.596
0.240	0.706	1.01	0.463	0.499	0.157	0.597	1.33	0.427	0.608
0.231	0.710	1.00	0.462	0.508	0.151	0.595	1.34	0.420	0.619
0.222	0.714	0.996	0.461	0.518	0.145	0.593	1.34	0.413	0.631
0.212	0.718	0.986	0.460	0.527	0.140	0.591	1.35	0.406	0.643
0.203	0.722	0.977	0.458	0.536	0.134	0.589	1.35	0.399	0.654
0.193	0.725	0.968	0.456	0.544	0.129	0.587	1.36	0.392	0.666
0.184	0.729	0.959	0.455	0.552	0.123	0.584	1.36	0.384	0.678
0.174	0.732	0.950	0.453	0.559	0.118	0.582	1.37	0.377	0.689
0.165	0.735	0.942	0.450	0.567	0.103	0.575	1.38	0.357	0.723
0.155	0.738	0.934	0.448	0.574					
0.146	0.741	0.926	0.446	0.580					
0.137	0.744	0.918	0.443	0.586					
0.127	0.746	0.911	0.441	0.592					
0.118	0.748	0.903	0.438	0.597					
0.109	0.750	0.896	0.436	0.602					
0.100	0.752	0.888	0.433	0.606					
0.0918	0.754	0.881	0.430	0.610					
0.0831	0.756	0.874	0.427	0.614					
0.0745	0.757	0.866	0.424	0.617					
0.0739	0.757	0.866	0.424	0.618					
<b><math>M_\infty = 4, \gamma = 1.4</math></b>									
0.279	0.694	1.03	0.534	0.459	0.176	0.620	1.26	0.429	0.588
0.275	0.697	1.03	0.536	0.468	0.173	0.619	1.27	0.426	0.593
0.269	0.699	1.03	0.538	0.478	0.170	0.618	1.27	0.422	0.598
0.263	0.702	1.02	0.540	0.488	0.167	0.618	1.27	0.419	0.603
0.256	0.706	1.01	0.541	0.499	0.164	0.617	1.28	0.415	0.608
0.248	0.711	1.00	0.542	0.511	0.159	0.615	1.28	0.408	0.618
0.237	0.718	0.987	0.543	0.524	0.156	0.614	1.29	0.405	0.623
0.226	0.726	0.966	0.543	0.536	0.153	0.613	1.29	0.401	0.628
0.213	0.735	0.946	0.542	0.548	0.151	0.612	1.29	0.397	0.633
0.200	0.743	0.925	0.541	0.558	0.145	0.609	1.30	0.390	0.644
0.188	0.752	0.907	0.539	0.567	0.140	0.607	1.31	0.383	0.654
0.176	0.759	0.890	0.537	0.575	0.135	0.605	1.31	0.375	0.664
0.164	0.766	0.875	0.535	0.582	0.130	0.602	1.32	0.368	0.674
0.152	0.772	0.862	0.533	0.589	0.125	0.599	1.33	0.360	0.685
0.141	0.778	0.849	0.530	0.595	0.122	0.598	1.33	0.355	0.691
0.129	0.784	0.837	0.528	0.601					
0.118	0.789	0.825	0.525	0.606					
0.107	0.794	0.814	0.523	0.610					
0.0968	0.799	0.804	0.520	0.614					
0.0862	0.803	0.794	0.516	0.617					
0.0756	0.808	0.784	0.515	0.620					
0.0572	0.814	0.765	0.511	0.623					

Table 1 Continued

$x$	$y$	$\eta$	$i$	$p$	$x$	$y$	$\eta$	$i$	$p$
$H = 30, V_\infty = 7500$					$H = 30, V_\infty = 5000$				
0.214	0.618	1.26	0.464	0.540	0.226	0.634	1.22	0.458	0.522
0.207	0.620	1.26	0.460	0.549	0.219	0.636	1.21	0.455	0.531
0.201	0.621	1.25	0.454	0.558	0.212	0.638	1.20	0.450	0.538
0.195	0.622	1.25	0.450	0.565	0.206	0.639	1.19	0.446	0.546
0.189	0.622	1.25	0.446	0.573	0.200	0.639	1.19	0.442	0.553
0.184	0.622	1.25	0.441	0.580	0.194	0.640	1.19	0.438	0.560
0.179	0.621	1.25	0.437	0.588	0.189	0.640	1.19	0.434	0.567
0.174	0.621	1.26	0.433	0.595	0.183	0.640	1.19	0.430	0.573
0.169	0.620	1.26	0.429	0.602	0.178	0.640	1.19	0.427	0.580
0.164	0.619	1.26	0.425	0.509	0.173	0.639	1.19	0.423	0.586
0.159	0.618	1.27	0.421	0.616	0.168	0.639	1.19	0.419	0.593
0.155	0.617	1.27	0.416	0.623	0.163	0.638	1.19	0.416	0.599
0.150	0.616	1.27	0.413	0.631	0.158	0.638	1.19	0.412	0.606
0.146	0.615	1.28	0.408	0.638	0.153	0.637	1.19	0.409	0.612
0.141	0.613	1.28	0.405	0.645	0.148	0.636	1.19	0.405	0.618
0.137	0.612	1.28	0.400	0.652	0.144	0.635	1.20	0.401	0.624
0.133	0.610	1.28	0.396	0.659	0.139	0.634	1.20	0.398	0.630
0.129	0.609	1.29	0.392	0.665	0.135	0.633	1.20	0.395	0.636
0.124	0.608	1.29	0.388	0.672	0.126	0.631	1.20	0.387	0.648
0.120	0.606	1.29	0.384	0.679	0.121	0.630	1.20	0.384	0.654
0.116	0.604	1.30	0.380	0.686	0.117	0.629	1.20	0.381	0.660
0.112	0.603	1.30	0.376	0.692	0.109	0.626	1.20	0.374	0.671
0.107	0.601	1.30	0.370	0.701	0.101	0.624	1.20	0.368	0.680
$H = 30, V_\infty = 6000$					$H = 30, V_\infty = 4000$				
0.225	0.633	1.22	0.460	0.521	0.240	0.651	1.16	0.459	0.503
0.219	0.635	1.21	0.457	0.530	0.232	0.653	1.15	0.457	0.514
0.212	0.637	1.20	0.453	0.538	0.224	0.656	1.15	0.454	0.524
0.206	0.637	1.20	0.449	0.546	0.215	0.657	1.14	0.451	0.534
0.200	0.638	1.20	0.445	0.553	0.207	0.659	1.14	0.448	0.543
0.195	0.638	1.20	0.441	0.560	0.200	0.660	1.14	0.445	0.552
0.190	0.638	1.20	0.437	0.568	0.192	0.660	1.13	0.442	0.561
0.184	0.638	1.21	0.434	0.575	0.185	0.661	1.13	0.439	0.569
0.179	0.637	1.21	0.430	0.582	0.178	0.661	1.13	0.435	0.578
0.174	0.637	1.21	0.427	0.589	0.171	0.661	1.13	0.432	0.586
0.169	0.636	1.21	0.423	0.596	0.164	0.661	1.13	0.428	0.594
0.164	0.636	1.22	0.419	0.603	0.157	0.660	1.13	0.425	0.602
0.160	0.635	1.22	0.416	0.610	0.150	0.660	1.13	0.421	0.610
0.155	0.634	1.22	0.412	0.617	0.143	0.659	1.13	0.417	0.618
0.150	0.633	1.22	0.409	0.624	0.137	0.658	1.13	0.414	0.625
0.146	0.632	1.23	0.405	0.630	0.130	0.657	1.13	0.410	0.633
0.141	0.631	1.23	0.401	0.637	0.124	0.656	1.13	0.406	0.640
0.136	0.630	1.23	0.397	0.644	0.116	0.655	1.13	0.402	0.648
0.128	0.627	1.23	0.390	0.657	0.111	0.654	1.13	0.398	0.653
0.123	0.626	1.24	0.386	0.663	0.105	0.653	1.13	0.395	0.660
0.115	0.623	1.24	0.378	0.675	0.0930	0.651	1.13	0.387	0.673
0.111	0.621	1.24	0.374	0.681					
0.105	0.620	1.24	0.370	0.688					

Table I Concluded

$x$	$y$	$\eta$	$i$	$p$	$x$	$y$	$\eta$	$i$	$p$
$H = 30, V_\infty = 3000$									
0.244	0.655	1.15	0.460	0.502	0.237	0.647	1.17	0.457	0.511
0.237	0.657	1.14	0.459	0.514	0.229	0.650	1.16	0.456	0.523
0.238	0.660	1.13	0.456	0.524	0.218	0.654	1.15	0.452	0.534
0.220	0.663	1.13	0.453	0.534	0.210	0.657	1.14	0.449	0.544
0.212	0.664	1.12	0.450	0.544	0.202	0.659	1.13	0.446	0.554
0.204	0.666	1.12	0.447	0.553	0.193	0.661	1.13	0.443	0.563
0.196	0.667	1.12	0.444	0.562	0.185	0.662	1.12	0.440	0.572
0.188	0.668	1.11	0.441	0.571	0.177	0.663	1.12	0.437	0.581
0.181	0.669	1.11	0.438	0.579	0.169	0.664	1.11	0.434	0.589
0.173	0.670	1.11	0.435	0.587	0.162	0.665	1.11	0.431	0.597
0.166	0.670	1.11	0.432	0.596	0.154	0.666	1.10	0.427	0.605
0.158	0.671	1.11	0.429	0.603	0.146	0.666	1.10	0.424	0.613
0.151	0.671	1.10	0.426	0.611	0.139	0.666	1.10	0.421	0.620
0.144	0.671	1.10	0.422	0.619	0.131	0.666	1.09	0.418	0.627
0.137	0.671	1.10	0.419	0.626	0.124	0.666	1.09	0.414	0.634
0.129	0.670	1.10	0.416	0.633	0.117	0.666	1.09	0.411	0.640
0.122	0.670	1.10	0.412	0.640	0.110	0.666	1.08	0.407	0.647
0.115	0.669	1.09	0.409	0.646	0.103	0.665	1.08	0.404	0.653
0.109	0.669	1.09	0.405	0.652	0.0962	0.665	1.08	0.400	0.658
0.102	0.668	1.09	0.402	0.658	0.0893	0.664	1.07	0.397	0.663
0.0954	0.668	1.08	0.393	0.664	0.0783	0.664	1.07	0.391	0.673
0.0840	0.666	1.08	0.392	0.674					
$H = 10, V_\infty = 5000$									
0.228	0.637	1.20	0.453	0.519					
0.221	0.639	1.20	0.450	0.527					
0.214	0.641	1.19	0.446	0.535					
0.208	0.643	1.18	0.442	0.542					
0.202	0.643	1.18	0.438	0.550					
0.196	0.644	1.18	0.435	0.556					
0.190	0.644	1.18	0.432	0.563					
0.185	0.645	1.17	0.428	0.570					
0.179	0.645	1.17	0.425	0.576					
0.174	0.645	1.17	0.422	0.583					
0.169	0.644	1.17	0.419	0.589					
0.164	0.644	1.17	0.416	0.596					
0.159	0.644	1.18	0.412	0.602					
0.154	0.643	1.18	0.409	0.608					
0.149	0.642	1.18	0.406	0.614					
0.144	0.642	1.18	0.403	0.620					
0.139	0.641	1.18	0.400	0.626					
0.134	0.640	1.18	0.397	0.632					
0.125	0.638	1.18	0.390	0.643					
0.121	0.637	1.18	0.387	0.649					
0.112	0.635	1.18	0.381	0.660					
0.103	0.633	1.18	0.375	0.670					
0.0971	0.632	1.18	0.371	0.677					

Table 2

 $\gamma = 1.4$ 

$\theta$	$p_b$	$i_b$	$C_x$	$p_b$	$i_b$	$C_x$	$p_b$	$i_b$	$C_x$
$M_\infty = \infty$				$M_\infty = 15$				$M_\infty = 6$	
0	0.917	0.500	1.83	0.918	0.511	1.82	0.929	0.569	1.81
5	0.911	0.499	1.82	0.914	0.511	1.82	0.923	0.569	1.80
10	0.889	0.495	1.81	0.895	0.507	1.80	0.902	0.565	1.76
15	0.849	0.489	1.76	0.854	0.500	1.76	0.861	0.558	1.74
20	0.793	0.479	1.71	0.798	0.490	1.70	0.809	0.548	1.69
25	0.727	0.467	1.64	0.731	0.478	1.64	0.745	0.535	1.63
30	0.656	0.454	1.56	0.660	0.465	1.56	0.674	0.520	1.55
35	0.578	0.438	1.48	0.582	0.448	1.48	0.596	0.502	1.47
40	0.497	0.419	1.40	0.499	0.429	1.40	0.517	0.481	1.39
45	0.414	0.398	1.31	0.416	0.407	1.31	0.438	0.459	1.31
50	0.344	0.378	1.23	0.346	0.386	1.23	0.365	0.436	1.22
55	0.276	0.354	1.15	0.277	0.363	1.15	0.296	0.411	1.15
60	0.217	0.331	1.08	0.219	0.339	1.08	0.237	0.385	1.08
65	0.167	0.307	1.02	0.168	0.314	1.02	0.185	0.359	1.02
70	0.125	0.283	0.973	0.127	0.290	0.972	0.142	0.333	0.97
75	0.0920	0.259	0.933	0.0940	0.260	0.931	0.107	0.307	0.92
80	0.0670	0.237	0.903	0.0680	0.243	0.902	0.0790	0.281	0.85
85	0.0470	0.214	0.885	0.0480	0.220	0.884	0.0558	0.255	0.85
90	0.0317	0.191	0.879	0.0331	0.198	0.878	0.0405	0.233	0.87
$M_\infty = 23$				$M_\infty = 10$				$M_\infty = 4$	
0	0.917	0.505	1.83	0.923	0.525	1.83	0.940	0.656	1.79
5	0.912	0.504	1.82	0.919	0.525	1.82	0.936	0.654	1.78
10	0.890	0.500	1.80	0.897	0.521	1.80	0.913	0.650	1.76
15	0.850	0.493	1.75	0.855	0.514	1.76	0.873	0.642	1.72
20	0.793	0.484	1.70	0.801	0.504	1.70	0.822	0.631	1.66
25	0.727	0.472	1.63	0.737	0.492	1.64	0.761	0.618	1.60
30	0.657	0.459	1.56	0.664	0.478	1.56	0.691	0.601	1.53
35	0.579	0.442	1.48	0.585	0.461	1.48	0.616	0.581	1.45
40	0.497	0.423	1.39	0.505	0.442	1.40	0.538	0.559	1.37
45	0.415	0.402	1.31	0.424	0.421	1.31	0.456	0.534	1.29
50	0.345	0.381	1.23	0.351	0.398	1.23	0.385	0.509	1.21
55	0.276	0.359	1.15	0.282	0.374	1.15	0.318	0.482	1.13
60	0.218	0.334	1.08	0.223	0.350	1.08	0.258	0.454	1.06
65	0.167	0.310	1.02	0.172	0.325	1.02	0.205	0.425	1.00
70	0.126	0.286	0.973	0.131	0.300	0.972	0.162	0.397	0.95
75	0.0930	0.262	0.932	0.0975	0.276	0.931	0.124	0.368	0.91
80	0.0675	0.239	0.903	0.0710	0.252	0.901	0.0930	0.338	0.85
85	0.0475	0.216	0.885	0.0500	0.228	0.885	0.0675	0.309	0.85
90	0.0325	0.194	0.879	0.0346	0.205	0.876	0.0495	0.283	0.85

Table 3

$\theta$	$r_b$	$i_b$	$p_b$	$C_x$	$p_b$	$i_b$	$p_b$	$C_x$	$p_b$	$i_b$	$p_b$	$C_x$
	$H = 60, V_\infty = 10000$					$H = 30, V_\infty = 6000$					$H = 30, V_\infty = 3000$	
0	0.503	16.4	1.93	0.961	0.506	13.2	1.92	0.947	0.526	3.05	1.87	
5	0.503	16.3	1.93	0.959	0.506	13.1	1.91	0.938	0.524	9.00	1.86	
10	0.501	15.9	1.92	0.941	0.504	12.9	1.89	0.900	0.519	3.68	1.92	
15	0.496	15.3	1.89	0.895	0.500	12.3	1.85	0.860	0.514	8.35	1.77	
20	0.491	14.6	1.83	0.840	0.495	11.6	1.79	0.807	0.506	7.65	1.72	
25	0.484	13.6	1.69	0.771	0.488	10.8	1.73	0.749	0.500	7.51	1.65	
30	0.478	12.3	1.58	0.689	0.480	9.84	1.65	0.685	0.489	5.66	1.58	
35	0.468	10.9	1.53	0.602	0.471	8.62	1.56	0.602	0.476	5.68	1.51	
40	0.458	9.25	1.45	0.510	0.460	7.41	1.46	0.521	0.461	5.15	1.42	
45	0.446	7.65	1.35	0.429	0.447	6.26	1.37	0.441	0.447	4.57	1.34	
50	0.435	6.42	1.25	0.349	0.434	5.27	1.28	0.369	0.430	3.92	1.26	
55	0.424	5.32	1.16	0.281	0.420	4.36	1.20	0.302	0.411	3.30	1.19	
60	0.412	4.31	1.09	0.222	0.404	3.55	1.12	0.241	0.392	2.73	1.11	
65	0.400	3.42	1.02	0.172	0.389	2.83	1.06	0.190	0.370	2.22	1.06	
70	0.388	2.70	0.975	0.130	0.372	2.23	1.00	0.147	0.349	1.80	1.00	
75	0.376	2.08	0.933	0.0975	0.356	1.72	0.967	0.112	0.326	1.43	0.964	
80	0.364	1.58	0.902	0.0718	0.339	1.32	0.936	0.0840	0.305	1.13	0.935	
85	0.352	1.18	0.889	0.0520	0.322	1.01	0.917	0.0620	0.283	0.875	0.917	
90	0.341	0.871	0.878	0.0376	0.305	0.758	0.911	0.0447	0.261	0.683	0.910	
	$H = 60, V_\infty = 7500$					$H = 30, V_\infty = 5000$					$H = 30, V_\infty = 5000$	
0	0.505	17.6	1.93	0.956	0.509	11.6	1.91	0.952	0.509	10.6	1.89	
5	0.505	17.5	1.92	0.950	0.507	11.9	1.89	0.943	0.507	10.5	1.88	
10	0.503	17.3	1.91	0.923	0.504	11.3	1.87	0.919	0.503	11.3	1.87	
15	0.501	16.6	1.87	0.883	0.500	10.8	1.82	0.878	0.499	10.0	1.82	
20	0.496	15.5	1.81	0.826	0.494	10.2	1.77	0.824	0.493	9.50	1.77	
25	0.491	14.4	1.74	0.755	0.487	9.51	1.70	0.755	0.486	8.85	1.71	
30	0.483	12.7	1.66	0.678	0.478	8.68	1.62	0.678	0.477	8.10	1.63	
35	0.478	11.3	1.57	0.595	0.468	7.69	1.53	0.597	0.465	7.18	1.54	
40	0.469	9.72	1.47	0.507	0.456	6.58	1.44	0.513	0.452	6.21	1.45	
45	0.458	8.18	1.38	0.421	0.442	5.63	1.35	0.424	0.437	5.34	1.36	
50	0.447	6.80	1.28	0.344	0.427	4.75	1.26	0.346	0.421	5.52	1.27	
55	0.436	5.76	1.20	0.273	0.410	3.92	1.18	0.276	0.404	3.77	1.19	
60	0.424	4.46	1.12	0.215	0.394	3.21	1.10	0.218	0.367	3.10	1.11	
65	0.412	3.51	1.06	0.165	0.377	2.59	1.04	0.168	0.370	2.50	1.05	
70	0.399	2.74	1.00	0.125	0.360	2.06	0.997	0.127	0.352	2.01	1.01	
75	0.386	2.10	0.967	0.0932	0.342	1.63	0.955	0.0955	0.334	1.57	0.964	
80	0.372	1.60	0.936	0.0692	0.325	1.28	0.925	0.0713	0.317	1.24	0.944	
85	0.359	1.20	0.918	0.0504	0.308	0.965	0.917	0.0520	0.299	0.97	0.915	
90	0.355	0.892	0.911	0.0362	0.292	0.744	0.900	0.0378	0.282	0.732	0.909	
	$H = 30, V_\infty = 7500$					$H = 30, V_\infty = 4000$					$H = 10, V_\infty = 3000$	
0	0.966	0.504	14.4	1.93	0.955	0.514	11.0	1.90	0.943	0.525	8.95	1.80
5	0.957	0.504	14.3	1.91	0.946	0.511	10.9	1.88	0.935	0.522	8.51	1.86
10	0.940	0.501	14.0	1.89	0.925	0.509	10.6	1.85	0.911	0.519	8.32	1.83
15	0.894	0.498	13.5	1.85	0.880	0.504	10.2	1.81	0.871	0.514	8.01	1.79
20	0.834	0.493	12.8	1.80	0.824	0.498	9.66	1.76	0.814	0.507	7.57	1.74
25	0.764	0.487	11.9	1.72	0.759	0.491	9.01	1.69	0.749	0.498	7.07	1.67
30	0.685	0.480	10.9	1.64	0.687	0.482	8.27	1.62	0.677	0.486	6.50	1.59
35	0.601	0.471	9.64	1.55	0.607	0.472	7.36	1.53	0.599	0.473	5.76	1.51
40	0.507	0.461	8.36	1.46	0.514	0.460	6.35	1.45	0.517	0.458	5.03	1.43
45	0.420	0.449	7.09	1.36	0.425	0.446	5.46	1.36	0.440	0.441	4.38	1.34
50	0.344	0.437	5.94	1.27	0.352	0.431	4.62	1.27	0.364	0.423	3.76	1.26
55	0.275	0.425	4.89	1.19	0.287	0.416	3.88	1.19	0.295	0.403	3.18	1.18
60	0.217	0.411	3.97	1.12	0.230	0.400	3.22	1.12	0.236	0.393	2.64	1.11
65	0.167	0.397	3.01	1.05	0.181	0.383	2.62	1.05	0.185	0.361	2.15	1.05
70	0.127	0.383	2.48	1.00	0.141	0.366	2.11	1.00	0.140	0.339	1.75	0.998
75	0.0950	0.368	1.92	0.964	0.108	0.349	1.67	0.952	0.106	0.317	1.40	0.957
80	0.0702	0.354	1.48	0.933	0.0817	0.331	1.31	0.932	0.0804	0.295	1.10	0.928
85	0.0516	0.339	1.12	0.916	0.0612	0.313	1.02	0.914	0.0567	0.273	0.864	0.911
90	0.0326	0.325	0.843	0.911	0.0450	0.295	0.766	0.905	0.0420	0.252	0.663	0.903

Table 4

 $\gamma = 1.4$ 

$x_w$	$\xi$	$y_w$	$p_w$	$x_w$	$\xi$	$y_w$	$p_w$	$x_w$	$\xi$	$y_w$	$p_w$
$M_\infty = \infty$				$M_\infty = 15$				$M_\infty = 6$			
-0.129	$\infty$	0.000	6	-0.133	$\infty$	0.000	5.86	-0.148	0.00	0.000	5.26
-0.10	4.75	0.266	6	-0.10	4.40	0.292	5.86	-0.10	3.75	0.362	5.22
0.00	2.16	0.566	6	0.00	2.13	0.581	5.84	0.00	2.11	0.632	5.12
0.10	1.60	0.736	6	0.10	1.58	0.753	5.81	0.10	1.59	0.800	5.02
0.15	1.42	0.812	6	0.15	1.40	0.833	5.80	0.15	1.42	0.875	4.97
0.20	1.28	0.880	6	0.20	1.27	0.900	5.79	0.20	1.29	0.943	4.91
0.25	1.17	0.941	6	0.25	1.16	0.961	5.77	0.25	1.19	1.00	4.85
0.30	1.08	0.998	6	0.30	1.07	1.01	5.76	0.30	1.10	1.06	4.79
0.35	1.00	1.05	6	0.35	1.01	1.06	5.74	0.35	1.04	1.11	4.73
0.40	0.953	1.09	6	0.40	0.954	1.11	5.73	0.40	0.987	1.16	4.68
0.45	0.901	1.14	6	0.45	0.904	1.16	5.71	0.45	0.940	1.21	4.62
0.50	0.855	1.18	6	0.50	0.860	1.20	5.70	0.50	0.898	1.26	4.57
0.55	0.815	1.23	6	0.55	0.821	1.25	5.68	0.55	0.861	1.30	4.52
0.60	0.779	1.27	6	0.60	0.787	1.29	5.67	0.60	0.828	1.34	4.47
0.65	0.748	1.30	6	0.65	0.756	1.33	5.65	0.65	0.798	1.38	4.42
0.70	0.719	1.34	6	0.70	0.728	1.36	5.63	0.70	0.772	1.42	4.37
0.75	0.693	1.38	6	0.75	0.703	1.40	5.62	0.75	0.747	1.46	4.32
0.80	0.669	1.41	6	0.80	0.680	1.43	5.60	0.80	0.725	1.50	4.27
0.85	0.648	1.44	6	0.85	0.659	1.47	5.58	0.85	0.705	1.53	4.23
0.90	0.628	1.48	6	0.90	0.639	1.50	5.57	0.90	0.586	1.57	4.18
0.95	0.609	1.51	6	0.95	0.621	1.53	5.55	0.95	0.570	1.60	4.14
1.00	0.593	1.54	6	1.00	0.604	1.56	5.53	1.00	0.650	1.64	4.09
$M_\infty = 23$				$M_\infty = 10$				$M_\infty = 4$			
-0.129	$\infty$	0.000	5.94	-0.136	0.00	0.000	5.71	-0.173	0.00	0.000	4.57
-0.10	4.69	0.274	5.94	-0.10	4.26	0.303	5.69	-0.10	3.07	0.465	4.45
0.00	2.17	0.572	5.93	0.00	2.13	0.594	5.65	0.00	1.97	0.707	4.20
0.10	1.60	0.750	5.92	0.10	1.58	0.767	5.60	0.10	1.56	0.885	4.16
0.15	1.42	0.825	5.91	0.15	1.41	0.842	5.58	0.15	1.42	0.959	4.08
0.20	1.28	0.892	5.91	0.20	1.28	0.903	5.55	0.20	1.30	1.02	4.01
0.25	1.17	0.954	5.90	0.25	1.17	0.970	5.52	0.25	1.21	1.09	3.93
0.30	1.08	1.01	5.89	0.30	1.09	1.02	5.49	0.30	1.13	1.14	3.85
0.35	1.00	1.06	5.88	0.35	1.02	1.07	5.46	0.35	1.07	1.20	3.78
0.40	0.950	1.11	5.88	0.40	0.954	1.12	5.43	0.40	1.02	1.25	3.72
0.45	0.900	1.15	5.87	0.45	0.914	1.17	5.40	0.45	0.984	1.30	3.67
0.50	0.855	1.20	5.86	0.50	0.871	1.22	5.37	0.50	0.946	1.35	3.61
0.55	0.817	1.24	5.86	0.55	0.832	1.26	5.34	0.55	0.913	1.40	3.55
0.60	0.732	1.28	5.85	0.60	0.797	1.30	5.31	0.60	0.833	1.44	3.48
0.65	0.750	1.32	5.84	0.65	0.737	1.34	5.28	0.65	0.855	1.49	3.45
0.70	0.722	1.35	5.83	0.70	0.740	1.38	5.25	0.70	0.801	1.53	3.40
0.75	0.697	1.39	5.83	0.75	0.714	1.41	5.22	0.75	0.808	1.57	3.35
0.80	0.674	1.42	5.82	0.80	0.692	1.45	5.19	0.80	0.788	1.61	3.30
0.85	0.652	1.46	5.81	0.85	0.671	1.48	5.16	0.85	0.769	1.65	3.26
0.90	0.633	1.49	5.80	0.90	0.651	1.51	5.13	0.90	0.751	1.69	3.21
0.95	0.614	1.52	5.80	0.95	0.634	1.55	5.10	0.95	0.735	1.72	3.15
1.00	0.593	1.55	5.79	1.00	0.617	1.58	5.07	1.00	0.720	1.76	3.11

Table 5

$x_w$	$\xi$	$y_w$	$\eta_w$	$i_w$	$\rho_w$	$p_w$	$\beta_w$
$H = 60, V_\infty = 10000$							
-0.0493	$\infty$	0.000	0.00	0.500	16.0	0.938	-
0.0000	3.30	0.330	1.87	0.458	16.5	0.861	0.582
0.10	1.81	0.566	1.44	0.385	17.4	0.719	1.92
0.15	1.50	0.650	1.25	0.348	17.3	0.655	2.46
0.20	1.31	0.720	1.12	0.316	17.1	0.596	2.86
0.25	1.16	0.782	1.01	0.288	16.8	0.543	3.26
0.30	1.05	0.838	0.928	0.265	16.4	0.495	3.59
0.35	0.970	0.888	0.859	0.244	15.9	0.455	3.88
0.40	0.899	0.935	0.800	0.225	15.5	0.419	4.15
0.45	0.840	0.978	0.749	0.208	15.1	0.387	4.40
0.50	0.790	1.01	0.706	0.193	14.6	0.358	4.63
0.55	0.746	1.05	0.668	0.180	14.2	0.333	4.84
0.60	0.709	1.09	0.634	0.168	13.8	0.311	5.04
0.65	0.676	1.12	0.605	0.158	13.4	0.291	5.22
0.70	0.646	1.16	0.578	0.149	13.0	0.273	5.39
0.75	0.620	1.19	0.555	0.140	12.7	0.256	5.55
0.80	0.596	1.22	0.533	0.133	12.4	0.242	5.70
0.85	0.575	1.25	0.514	0.126	12.1	0.229	5.85
0.90	0.556	1.28	0.496	0.119	11.8	0.217	5.98
0.95	0.538	1.30	0.479	0.113	11.6	0.205	6.11
1.00	0.521	1.33	0.464	0.108	11.4	0.195	6.24
$H = 60, V_\infty = 7500$							
-0.0465	$\infty$	0.000	0.00	0.502	16.9	0.942	-
0.0000	3.44	0.319	1.88	0.464	16.5	0.868	0.583
0.10	1.84	0.564	1.41	0.389	15.3	0.723	1.82
0.15	1.55	0.643	1.24	0.356	14.7	0.660	2.20
0.20	1.35	0.715	1.11	0.327	14.1	0.603	2.53
0.25	1.21	0.779	1.01	0.300	13.6	0.553	2.82
0.30	1.09	0.837	0.930	0.276	13.1	0.507	3.08
0.35	1.00	0.890	0.860	0.255	12.7	0.465	3.32
0.40	0.935	0.938	0.802	0.236	12.2	0.429	3.54
0.45	0.873	0.983	0.751	0.219	11.8	0.397	3.74
0.50	0.820	1.02	0.708	0.204	11.5	0.369	3.92
0.55	0.774	1.06	0.670	0.190	11.2	0.343	4.12
0.60	0.734	1.10	0.637	0.178	11.1	0.320	4.30
0.65	0.698	1.13	0.608	0.167	11.0	0.299	4.50
0.70	0.665	1.17	0.581	0.156	11.0	0.280	4.70
0.75	0.635	1.20	0.558	0.147	11.1	0.263	4.90
0.80	0.609	1.23	0.536	0.138	11.1	0.247	5.10
0.85	0.583	1.26	0.517	0.131	11.1	0.233	5.31
0.90	0.566	1.29	0.499	0.124	10.9	0.221	5.50
0.95	0.547	1.32	0.483	0.118	10.8	0.210	5.69
1.00	0.530	1.35	0.468	0.113	10.6	0.200	5.90
1.05	0.515	1.37	0.454	0.108	10.4	0.191	6.04

Table 5 Continued

$x_w$	$\xi$	$y_w$	$\eta_w$	$i_w$	$p_w$	$p_w$	$\beta_w$
$H = 30, V_\infty = 7500$							
-0.0554	$\infty$	0.000	0.00	0.501	14.2	0.931	-
0.0000	3.17	0.356	1.70	0.456	13.7	0.845	0.567
0.10	1.82	0.590	1.34	0.386	12.9	0.711	1.64
0.15	1.56	0.672	1.20	0.356	12.5	0.655	1.98
0.20	1.37	0.745	1.10	0.329	12.2	0.602	2.26
0.25	1.23	0.810	0.999	0.303	11.8	0.553	2.54
0.30	1.11	0.869	0.917	0.278	11.4	0.506	2.80
0.35	1.01	0.922	0.848	0.256	11.1	0.465	3.03
0.40	0.943	0.971	0.791	0.237	10.8	0.428	3.25
0.45	0.882	1.01	0.744	0.221	10.6	0.397	3.44
0.50	0.829	1.05	0.703	0.206	10.4	0.369	3.62
0.55	0.783	1.10	0.668	0.192	10.3	0.344	3.80
0.60	0.744	1.13	0.637	0.180	10.2	0.322	3.97
0.65	0.708	1.17	0.609	0.169	10.2	0.302	4.16
0.70	0.677	1.20	0.584	0.159	10.2	0.284	4.37
0.75	0.649	1.24	0.562	0.151	10.1	0.268	4.57
0.80	0.624	1.27	0.542	0.143	10.0	0.254	4.74
0.85	0.602	1.30	0.523	0.136	9.97	0.240	4.90
0.90	0.582	1.33	0.506	0.129	9.84	0.228	5.05
0.95	0.564	1.36	0.489	0.123	9.69	0.217	5.21
1.00	0.547	1.39	0.475	0.118	9.54	0.207	5.38
$H = 30, V_\infty = 6000$							
-0.0635	$\infty$	0.000	0.00	0.503	12.4	0.921	-
0.0000	2.97	0.383	1.56	0.452	11.9	0.825	0.579
0.10	1.78	0.608	1.26	0.383	11.2	0.694	1.54
0.15	1.53	0.691	1.14	0.354	10.8	0.638	1.84
0.20	1.34	0.763	1.04	0.326	10.5	0.585	2.11
0.25	1.20	0.827	0.954	0.299	10.3	0.536	2.37
0.30	1.09	0.884	0.885	0.276	10.2	0.494	2.61
0.35	1.00	0.936	0.828	0.256	10.2	0.457	2.84
0.40	0.937	0.985	0.778	0.238	10.2	0.423	3.08
0.45	0.877	1.03	0.735	0.221	10.1	0.394	3.29
0.50	0.827	1.07	0.697	0.207	9.98	0.367	3.50
0.55	0.784	1.11	0.663	0.195	9.81	0.344	3.68
0.60	0.747	1.15	0.632	0.183	9.62	0.322	3.86
0.65	0.714	1.18	0.606	0.173	9.42	0.304	4.03
0.70	0.685	1.22	0.581	0.164	9.22	0.287	4.20
0.75	0.660	1.25	0.559	0.156	9.03	0.271	4.34
0.80	0.636	1.28	0.539	0.149	8.84	0.257	4.47
0.85	0.615	1.32	0.521	0.142	8.65	0.244	4.58
0.90	0.596	1.35	0.505	0.135	8.47	0.233	4.69
0.95	0.579	1.38	0.489	0.130	8.30	0.222	4.79
1.00	0.563	1.40	0.475	0.125	8.12	0.213	4.89

Table 5 Continued

$x_w$	$\xi$	$y_w$	$n_w$	$i_w$	$\rho_w$	$p_w$	$\beta_w$
$H = 30, V_\infty = 5000$							
-0.0727	$\infty$	0.000	0.00	0.505	10.9	0.911	-
0.0000	2.79	0.413	1.46	0.448	10.7	0.805	0.569
0.10	1.74	0.629	1.23	0.382	10.4	0.684	1.44
0.15	1.49	0.702	1.10	0.351	10.2	0.626	1.78
0.20	1.32	0.772	1.01	0.325	10.1	0.577	2.08
0.25	1.19	0.835	0.942	0.300	9.99	0.532	2.38
0.30	1.09	0.892	0.874	0.278	9.78	0.491	2.63
0.35	1.01	0.945	0.818	0.259	9.56	0.455	2.81
0.40	0.945	0.994	0.769	0.242	9.31	0.423	2.99
0.45	0.889	1.03	0.727	0.227	9.07	0.395	3.17
0.50	0.841	1.08	0.690	0.213	8.83	0.370	3.32
0.55	0.799	1.12	0.657	0.201	8.59	0.347	3.47
0.60	0.763	1.16	0.628	0.190	8.38	0.326	3.60
0.65	0.731	1.20	0.602	0.180	8.17	0.308	3.72
0.70	0.703	1.23	0.579	0.172	7.98	0.291	3.83
0.75	0.677	1.27	0.557	0.163	7.80	0.276	3.94
0.80	0.654	1.30	0.538	0.156	7.63	0.263	4.04
0.85	0.632	1.33	0.520	0.149	7.48	0.250	4.13
0.90	0.613	1.36	0.504	0.143	7.33	0.239	4.22
0.95	0.596	1.39	0.489	0.137	7.20	0.228	4.30
1.00	0.580	1.42	0.475	0.132	7.07	0.218	4.38
$H = 30, V_\infty = 4000$							
-0.0770	$\infty$	0.000	0.00	0.509	10.2	0.906	
0.0000	2.75	0.431	1.40	0.451	9.97	0.799	0.551
0.10	1.75	0.646	1.18	0.379	9.33	0.669	1.41
0.15	1.45	0.733	1.04	0.350	9.01	0.609	1.74
0.20	1.31	0.809	0.973	0.327	8.72	0.565	1.98
0.25	1.19	0.871	0.904	0.303	8.44	0.522	2.18
0.30	1.09	0.929	0.838	0.283	8.17	0.483	2.37
0.35	1.02	0.982	0.792	0.266	7.94	0.452	2.53
0.40	0.966	1.03	0.750	0.251	7.73	0.424	2.67
0.45	0.913	1.07	0.713	0.237	7.54	0.398	2.80
0.50	0.868	1.12	0.680	0.225	7.34	0.375	2.91
0.55	0.828	1.16	0.651	0.214	7.17	0.354	3.02
0.60	0.793	1.20	0.624	0.203	7.01	0.335	3.12
0.65	0.761	1.24	0.600	0.194	6.87	0.317	3.22
0.70	0.732	1.28	0.578	0.185	6.78	0.301	3.32
0.75	0.705	1.31	0.558	0.176	6.69	0.286	3.42
0.80	0.681	1.35	0.540	0.169	6.60	0.273	3.51
0.85	0.660	1.38	0.523	0.162	6.51	0.261	3.60
0.90	0.640	1.41	0.508	0.156	6.43	0.249	3.69
0.95	0.621	1.45	0.494	0.150	6.36	0.239	3.78
1.00	0.605	1.48	0.481	0.145	6.30	0.229	3.87

Table 5 Continued

$x_w$	$\xi$	$y_w$	$\eta_w$	$i_w$	$p_w$	$p_w$	$\beta_w$
$H = 30, V_\infty = 3000$							
-0.0936	$\infty$	0.000	0.00	0.518	8.44	0.888	-
0.0000	2.53	0.483	1.21	0.451	7.82	0.760	0.536
0.10	1.70	0.688	1.05	0.392	7.34	0.650	1.23
0.15	1.52	0.776	0.984	0.367	7.07	0.607	1.43
0.20	1.36	0.848	0.916	0.343	6.87	0.562	1.62
0.25	1.23	0.913	0.856	0.320	6.73	0.520	1.81
0.30	1.13	0.971	0.804	0.300	6.59	0.483	1.98
0.35	1.05	1.02	0.762	0.283	6.47	0.453	2.12
0.40	0.992	1.07	0.724	0.267	6.37	0.425	2.25
0.45	0.938	1.12	0.691	0.253	6.27	0.400	2.38
0.50	0.890	1.17	0.661	0.241	6.18	0.378	2.50
0.55	0.849	1.21	0.635	0.229	6.10	0.357	2.62
0.60	0.812	1.25	0.610	0.219	6.02	0.339	2.73
0.65	0.780	1.29	0.588	0.209	5.95	0.322	2.83
0.70	0.751	1.33	0.568	0.200	5.88	0.306	2.93
0.75	0.724	1.37	0.550	0.192	5.81	0.292	3.03
0.80	0.700	1.40	0.533	0.185	5.75	0.279	3.12
0.85	0.678	1.44	0.517	0.178	5.69	0.267	3.21
0.90	0.658	1.47	0.503	0.172	5.63	0.256	3.29
0.95	0.640	1.50	0.489	0.166	5.57	0.246	3.38
1.00	0.623	1.53	0.477	0.161	5.52	0.236	3.46
$H = 10, V_\infty = 5000$							
-0.0785	$\infty$	0.000	0.00	0.503	10.0	0.903	-
0.0000	2.69	0.431	1.39	0.443	9.87	0.792	0.553
0.10	1.72	0.643	1.18	0.379	9.64	0.674	1.40
0.15	1.49	0.717	1.07	0.350	9.48	0.619	1.71
0.20	1.32	0.787	0.996	0.324	9.31	0.572	1.98
0.25	1.19	0.850	0.922	0.300	9.13	0.527	2.22
0.30	1.09	0.907	0.858	0.278	8.95	0.487	2.45
0.35	1.01	0.960	0.805	0.259	8.76	0.452	2.65
0.40	0.951	1.00	0.760	0.243	8.57	0.422	2.87
0.45	0.896	1.05	0.720	0.228	8.39	0.395	3.05
0.50	0.848	1.09	0.685	0.215	8.22	0.370	3.15
0.55	0.807	1.14	0.654	0.203	8.05	0.348	3.28
0.60	0.771	1.18	0.626	0.192	7.89	0.328	3.42
0.65	0.738	1.21	0.601	0.182	7.74	0.310	3.54
0.70	0.710	1.25	0.578	0.173	7.61	0.293	3.66
0.75	0.684	1.28	0.557	0.165	7.48	0.278	3.77
0.80	0.660	1.32	0.539	0.158	7.36	0.265	3.88
0.85	0.639	1.35	0.521	0.151	7.25	0.252	3.98
0.90	0.619	1.38	0.505	0.144	7.16	0.241	4.08
0.95	0.601	1.41	0.490	0.139	7.06	0.230	4.17
1.00	0.585	1.44	0.477	0.133	6.96	0.220	4.26

Table 5 Concluded

$\xi_w$	$\xi$	$y_w$	$\eta_w$	$i_w$	$p_w$	$p_w$	$\beta_w$
$H = 10, V_\infty = 3000$							
-0.0995	$\infty$	0.000	0.00	0.516	7.94	0.881	-
0.0000	2.45	0.497	1.16	0.445	7.42	0.747	0.540
0.10	1.57	0.697	1.03	0.386	7.02	0.642	1.23
0.15	1.50	0.782	0.969	0.364	6.87	0.600	1.41
0.20	1.34	0.853	0.904	0.340	6.75	0.556	1.61
0.25	1.21	0.917	0.846	0.316	6.65	0.514	1.81
0.30	1.12	0.975	0.797	0.297	6.55	0.473	1.98
0.35	1.04	1.02	0.756	0.280	6.45	0.449	2.13
0.40	0.984	1.08	0.720	0.264	6.36	0.421	2.27
0.45	0.930	1.12	0.687	0.251	6.27	0.397	2.40
0.50	0.884	1.17	0.658	0.238	6.18	0.374	2.52
0.55	0.843	1.21	0.631	0.227	6.10	0.354	2.64
0.60	0.807	1.25	0.608	0.216	6.03	0.336	2.75
0.65	0.775	1.29	0.586	0.207	5.96	0.319	2.85
0.70	0.746	1.33	0.566	0.198	5.89	0.304	2.95
0.75	0.720	1.37	0.548	0.190	5.82	0.290	3.05
0.80	0.697	1.40	0.531	0.183	5.76	0.277	3.14
0.85	0.675	1.44	0.515	0.176	5.70	0.265	3.23
0.90	0.655	1.47	0.501	0.170	5.64	0.254	3.31
0.95	0.637	1.50	0.488	0.164	5.59	0.244	3.40
1.00	0.620	1.53	0.475	0.159	5.53	0.234	3.48

Table 6

 $\theta_b = 0^\circ, \gamma = 1.4$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\rho_w$	$\xi \cdot 10$	$y_w$	$\rho_w$	$\xi \cdot 10$	$y_w$	$\rho_w$
$M_\infty = \infty$									
1.0	5.93	1.54	6	6.04	1.56	5.53	6.53	1.64	4.09
1.2	5.35	1.65	6	5.48	1.68	5.47	6.00	1.76	3.93
1.5	4.73	1.80	6	4.87	1.83	5.37	5.41	1.93	3.72
2.5	3.55	2.21	6	3.71	2.25	5.06	4.32	2.41	3.18
3.5	2.95	2.53	6	3.12	2.59	4.79	3.77	2.81	2.83
4.5	2.57	2.80	6	2.75	2.88	4.55	3.42	3.17	2.58
5.5	2.30	3.05	6	2.49	3.14	4.34	3.19	3.50	2.40
6.5	2.10	3.26	6	2.30	3.38	4.15	3.02	3.81	2.25
7.5	1.94	3.47	6	2.15	3.60	3.99	2.89	4.11	2.14
8.5	1.81	3.66	6	2.03	3.81	3.84	2.78	4.39	2.05
9.5	1.70	3.83	6	1.92	4.01	3.70	2.70	4.66	1.97
10.5	1.62	4.00	6	1.84	4.20	3.58	2.62	4.93	1.90
12.5	1.47	4.30	6	1.71	4.55	3.37	2.51	5.44	1.80
14.5	1.36	4.59	6	1.61	4.88	3.19	2.43	5.93	1.72
16.5	1.26	4.85	6	1.53	5.20	3.04	2.36	6.41	1.65
18.5	1.19	5.09	6	1.46	5.50	2.91	2.30	6.88	1.60
20.5	1.13	5.33	6	1.40	5.78	2.80	2.26	7.34	1.55
25.5	1.02	5.86	6	1.30	6.46	2.57	2.17	8.45	1.47
30.5	0.949	6.36	6	1.22	7.09	2.40	2.11	9.51	1.41
40.5	0.833	7.24	6	1.13	8.27	2.18	2.03	11.5	1.33
50.5	0.750	8.03	6	1.07	9.37	2.03	1.98	13.5	1.28
60.5	0.687	8.75	6	1.02	10.4	1.91	1.94	15.5	1.24
80.5				0.962	12.4	1.75	1.89	19.3	1.19
100				0.918	14.2	1.64	1.86	23.0	1.16
120							1.83	28.6	1.13
$M_\infty = 23$									
1.0	5.98	1.55	5.79	6.16	1.58	5.07	7.20	1.76	3.13
1.2	5.41	1.66	5.75	5.61	1.69	4.96	6.70	1.90	2.98
1.5	4.79	1.82	5.71	5.00	1.85	4.80	6.14	2.09	2.79
2.5	3.62	2.23	5.54	3.87	2.29	4.33	5.08	2.64	2.38
3.5	3.03	2.56	5.39	3.25	2.64	3.96	4.55	3.12	2.13
4.5	2.65	2.84	5.24	2.93	2.95	3.67	4.22	3.56	1.95
5.5	2.39	3.09	5.10	2.68	3.23	3.43	4.00	3.97	1.83
6.5	2.19	3.32	4.97	2.50	3.49	3.24	3.83	4.36	1.74
7.5	2.04	3.53	4.85	2.35	3.73	3.07	3.71	4.74	1.67
8.5	1.91	3.73	4.73	2.24	3.96	2.93	3.61	5.10	1.62
9.5	1.81	3.92	4.62	2.14	4.18	2.81	3.52	5.46	1.57
10.5	1.72	4.09	4.52	2.07	4.39	2.70	3.46	5.81	1.53
12.5	1.58	4.42	4.33	1.94	4.79	2.53	3.35	6.49	1.46
14.5	1.48	4.73	4.16	1.85	5.17	2.39	3.27	7.15	1.41
16.5	1.39	5.01	4.00	1.77	5.53	2.27	3.21	7.79	1.38
18.5	1.32	5.29	3.86	1.71	5.88	2.18	3.15	8.43	1.35
20.5	1.26	5.55	3.74	1.66	6.22	2.10	3.11	9.06	1.32
25.5	1.15	6.15	3.48	1.56	7.02	1.94	3.03	10.5	1.27
30.5	1.08	6.70	3.30	1.49	7.78	1.82	2.97	12.0	1.24
40.5	0.982	7.73	3.01	1.40	9.23	1.67	2.90	15.0	1.19
50.5	0.911	8.68	2.79	1.34	10.6	1.57	2.84	17.8	1.16
60.5	0.858	9.56	2.61	1.30	11.9	1.50	2.81	20.6	1.14
80.5	0.784	11.2	2.35	1.24	14.4	1.41	2.76	26.2	1.11
100	0.735	12.7	2.17	1.21	16.9	1.35	2.74	31.7	1.10
140							2.70	42.6	1.07
$M_\infty = 10$									
$M_\infty = 4$									

Table 7

$\theta_b$	$r_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$p_w \cdot 10$	$\beta_w$
$H = 60, V_\infty = 10000$								
1.0	5.21	1.33	4.64	1.08	11.4	1.95	6.24	
1.2	4.65	1.43	4.15	0.909	11.0	1.62	6.69	
1.5	4.04	1.56	3.62	0.721	11.1	1.28	7.83	
2.5	3.03	1.90	2.67	0.443	8.92	0.758	9.68	
3.5	2.56	2.18	2.19	0.327	7.46	0.540	10.5	
4.5	2.26	2.42	1.91	0.264	6.65	0.422	11.1	
5.5	2.05	2.64	1.70	0.222	6.19	0.346	11.6	
6.5	1.88	2.83	1.55	0.192	5.91	0.292	12.2	
7.5	1.75	3.01	1.43	0.170	5.69	0.253	12.9	
8.5	1.64	3.18	1.34	0.153	5.51	0.224	13.5	
9.5	1.55	3.34	1.26	0.140	5.36	0.200	14.0	
10.5	1.48	3.50	1.19	0.129	5.21	0.181	14.5	
12.5	1.36	3.78	1.08	0.113	4.97	0.153	15.4	
14.5	1.27	4.04	1.00	0.101	4.76	0.133	16.2	
16.5	1.19	4.29	0.933	0.0927	4.58	0.117	16.8	
18.5	1.14	4.52	0.881	0.0864	4.44	0.106	17.4	
20.5	1.09	4.75	0.839	0.0816	4.31	0.0985	17.8	
25.5	1.00	5.27	0.757	0.0726	4.06	0.0929	18.8	
30.5	0.941	5.76	0.695	0.0664	3.85	0.0723	19.6	
40.5	0.846	6.65	0.605	0.0581	3.52	0.0582	20.8	
50.5	0.779	7.46	0.540	0.0528	3.27	0.0492	21.8	
60.5	0.729	8.21	0.491	0.0491	3.07	0.0429	22.6	
80.5	0.661	9.59	0.421	0.0443	2.77	0.0350	23.7	
100	0.614	10.8	0.373	0.0413	2.55	0.0301	24.5	
$H = 60, V_\infty = 7500$								
1.0	5.31	1.35	4.68	1.13	10.4	2.00	5.90	
1.2	4.76	1.45	4.18	0.963	9.84	1.67	6.40	
1.5	4.20	1.58	3.65	0.789	8.80	1.34	6.91	
2.55	3.19	1.96	2.68	0.499	6.77	0.803	7.94	
3.55	2.68	2.25	2.21	0.374	6.03	0.575	8.70	
4.55	2.36	2.50	1.92	0.303	5.65	0.449	9.52	
5.55	2.14	2.73	1.72	0.258	5.37	0.370	10.2	
6.55	1.97	2.93	1.57	0.226	5.14	0.314	10.8	
7.55	1.83	3.12	1.45	0.203	4.94	0.274	11.4	
8.55	1.73	3.30	1.35	0.185	4.76	0.243	11.9	
9.55	1.64	3.47	1.27	0.171	4.61	0.218	12.3	
10.5	1.56	3.63	1.20	0.159	4.46	0.198	12.7	
12.5	1.44	3.93	1.09	0.142	4.22	0.169	13.4	
14.5	1.35	4.21	1.01	0.130	4.03	0.148	13.9	
16.5	1.28	4.47	0.945	0.121	3.86	0.132	14.4	
18.5	1.22	4.72	0.894	0.115	3.73	0.121	14.8	
20.5	1.18	4.96	0.850	0.109	3.61	0.112	15.1	
25.5	1.08	5.53	0.763	0.099	3.37	0.0957	15.8	
30.5	1.02	6.05	0.697	0.0929	3.17	0.0840	16.4	
40.5	0.926	7.02	0.601	0.0838	2.87	0.0687	17.2	
50.5	0.860	7.91	0.533	0.0779	2.64	0.0590	17.8	
60.5	0.812	8.75	0.482	0.0738	2.47	0.0523	18.3	
80.5	0.747	10.3	0.413	0.0687	2.24	0.0440	19.0	
100	0.704	11.7	0.364	0.0654	2.07	0.0388	19.4	

Table 7 Continued

$x_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$p_w$	$p_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 7500$							
1.0	5.47	1.39	4.75	1.18	9.54	2.07	5.38
1.2	4.93	1.49	4.26	1.00	8.96	1.75	5.85
1.5	4.36	1.63	3.74	0.830	8.17	1.41	6.37
2.5	3.33	2.01	2.79	0.531	6.74	0.865	7.50
3.5	2.79	2.31	2.31	0.394	6.18	0.618	8.46
4.5	2.45	2.57	2.01	0.317	5.81	0.482	9.32
5.5	2.21	2.80	1.79	0.267	5.53	0.394	10.0
6.5	2.03	3.01	1.63	0.234	5.31	0.335	10.7
7.5	1.89	3.21	1.51	0.209	5.11	0.291	11.2
8.5	1.78	3.39	1.41	0.190	4.94	0.258	11.7
9.5	1.68	3.57	1.32	0.174	4.79	0.231	12.2
10.5	1.61	3.73	1.25	0.162	4.65	0.210	12.6
12.5	1.48	4.04	1.14	0.144	4.41	0.178	13.3
14.5	1.38	4.23	1.05	0.130	4.22	0.155	13.9
16.5	1.30	4.60	0.982	0.121	4.05	0.139	14.4
18.5	1.25	4.85	0.929	0.114	3.92	0.127	14.8
20.5	1.20	5.10	0.886	0.108	3.81	0.117	15.1
25.5	1.11	5.67	0.796	0.0983	3.56	0.0998	15.9
30.5	1.03	6.21	0.728	0.0909	3.36	0.0871	16.5
40.5	0.938	7.19	0.629	0.0811	3.05	0.0708	17.5
50.5	0.868	8.10	0.558	0.0749	2.81	0.0603	18.2
60.5	0.818	8.94	0.506	0.0706	2.63	0.0533	18.7
80.5	0.751	10.5	0.435	0.0653	2.38	0.0446	19.5
100	0.705	11.9	0.387	0.0519	2.21	0.0393	20.0
$H = 30, V_\infty = 6000$							
1.0	5.63	1.40	4.75	1.25	8.12	2.13	4.89
1.2	5.10	1.51	4.28	1.08	7.54	1.81	5.22
1.5	4.52	1.65	3.76	0.896	6.98	1.47	5.62
2.5	3.43	2.04	2.81	0.577	6.11	0.900	6.82
3.5	2.87	2.36	2.33	0.434	5.64	0.647	7.80
4.5	2.52	2.63	2.02	0.354	5.30	0.506	8.59
5.5	2.28	2.87	1.81	0.302	5.02	0.416	9.24
6.5	2.10	3.08	1.65	0.266	4.80	0.353	9.80
7.5	1.96	3.29	1.52	0.241	4.60	0.309	10.2
8.5	1.85	3.48	1.42	0.221	4.44	0.275	10.6
9.5	1.75	3.66	1.33	0.206	4.29	0.248	11.0
10.5	1.67	3.83	1.26	0.193	4.15	0.226	11.4
12.5	1.55	4.15	1.14	0.173	3.92	0.193	11.9
14.5	1.45	4.45	1.05	0.159	3.72	0.169	12.4
16.5	1.37	4.73	0.982	0.149	3.56	0.151	12.9
18.5	1.30	5.00	0.922	0.141	3.42	0.137	13.2
20.5	1.25	5.26	0.874	0.135	3.30	0.127	13.5
25.5	1.16	5.86	0.782	0.124	3.06	0.108	14.1
30.5	1.09	6.43	0.711	0.116	2.87	0.0955	14.5
40.5	1.00	7.47	0.614	0.106	2.60	0.0794	15.2
50.5	0.937	8.43	0.547	0.100	2.41	0.0694	15.7
60.5	0.890	9.35	0.497	0.0959	2.27	0.0624	16.0
80.5	0.825	11.0	0.423	0.0900	2.06	0.0531	16.5
100	0.780	12.6	0.371	0.0861	1.91	0.0472	16.9

Table 7. Continued

$\theta_b = 0$	$x_W$	$E \cdot 10$	$y_W$	$\eta_W \cdot 10$	$i_W \cdot 10$	$\rho_W$	$P_W \cdot 10$	$\beta_W$
$H = 30, V_\infty = 5000$								
1.0	5.80	1.42	4.75	1.32	7.07	2.18	4.38	
1.2	5.25	1.53	4.29	1.14	6.72	1.86	4.69	
1.5	4.64	1.68	3.78	0.956	6.35	1.52	5.13	
2.5	3.51	2.08	2.83	0.626	5.64	0.933	6.35	
3.5	2.96	2.40	2.35	0.481	5.20	0.676	7.24	
4.5	2.61	2.68	2.04	0.398	4.86	0.533	7.93	
5.5	2.36	2.93	1.83	0.345	4.59	0.442	8.50	
6.5	2.18	3.15	1.66	0.308	4.37	0.378	8.97	
7.5	2.04	3.36	1.54	0.281	4.18	0.331	9.38	
8.5	1.93	3.56	1.43	0.261	4.01	0.296	9.73	
9.5	1.83	3.75	1.34	0.244	3.86	0.268	10.0	
10.5	1.75	3.93	1.27	0.230	3.73	0.244	10.3	
12.5	1.62	4.27	1.15	0.210	3.51	0.210	10.8	
14.5	1.52	4.58	1.06	0.196	3.32	0.185	11.2	
16.5	1.44	4.88	0.983	0.184	3.16	0.166	11.5	
18.5	1.38	5.16	0.919	0.176	3.02	0.152	11.8	
20.5	1.33	5.43	0.869	0.169	2.91	0.141	12.0	
25.5	1.24	6.07	0.776	0.157	2.69	0.121	12.4	
30.5	1.17	6.67	0.711	0.150	2.54	0.109	12.7	
40.5	1.08	7.80	0.615	0.140	2.31	0.0929	13.2	
50.5	1.02	8.86	0.545	0.133	2.15	0.0819	13.6	
60.5	0.977	9.85	0.492	0.128	2.02	0.0743	13.8	
80.5	0.912	11.7	0.415	0.121	1.84	0.0642	14.2	
110	0.852	14.3	0.341	0.115	1.67	0.0554	14.6	
$H = 30, V_\infty = 4000$								
1.0	6.05	1.48	4.81	1.45	5.30	2.29	3.87	
1.2	5.47	1.59	4.36	1.26	6.07	1.96	4.19	
1.5	4.86	1.75	3.86	1.07	5.79	1.62	4.62	
2.5	3.71	2.17	2.91	0.728	5.14	1.01	5.71	
3.5	3.13	2.51	2.41	0.571	4.70	0.745	6.47	
4.5	2.77	2.80	2.10	0.483	4.37	0.593	7.05	
5.5	2.51	3.06	1.87	0.425	4.11	0.492	7.52	
6.5	2.33	3.30	1.71	0.385	3.89	0.425	7.89	
7.5	2.18	3.53	1.57	0.356	3.70	0.375	8.22	
8.5	2.06	3.74	1.46	0.333	3.54	0.336	8.51	
9.5	1.97	3.94	1.38	0.315	3.41	0.306	8.75	
10.5	1.89	4.14	1.30	0.301	3.30	0.282	8.96	
12.5	1.75	4.50	1.17	0.278	3.09	0.244	9.32	
14.5	1.66	4.84	1.07	0.262	2.90	0.217	9.61	
16.5	1.58	5.16	0.998	0.250	2.75	0.197	9.85	
18.5	1.51	5.48	0.931	0.240	2.62	0.180	10.0	
20.5	1.46	5.77	0.879	0.233	2.52	0.168	10.2	
25.5	1.38	6.48	0.787	0.221	2.35	0.148	10.5	
30.5	1.31	7.15	0.716	0.212	2.21	0.134	10.7	
40.5	1.22	8.42	0.611	0.199	2.01	0.115	11.0	
50.5	1.15	9.61	0.536	0.191	1.87	0.103	11.3	
60.5	1.11	10.7	0.482	0.186	1.77	0.0946	11.4	
80.5	1.04	12.8	0.403	0.178	1.63	0.0833	11.7	
110	0.990	15.9	0.327	0.171	1.49	0.0736	11.9	

Table 7 Continued

 $\theta_b = 0^\circ$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$p_w$	$p_w \cdot 10$	$R_w$
$H = 30, V_\infty = 3000$							
1.0	6.23	1.53	4.77	1.61	5.52	2.36	3.46
1.2	5.66	1.65	4.34	1.42	5.32	2.04	3.75
1.5	5.04	1.81	3.85	1.23	5.06	1.70	4.12
2.5	3.86	2.27	2.88	0.872	4.40	1.07	5.04
3.5	3.28	2.63	2.39	0.714	3.98	0.804	5.63
4.5	2.94	2.93	2.09	0.625	3.67	0.653	6.06
5.5	2.68	3.22	1.86	0.565	3.43	0.551	6.41
6.5	2.50	3.47	1.69	0.523	3.24	0.480	6.69
7.5	2.36	3.72	1.56	0.492	3.07	0.429	6.91
8.5	2.25	3.95	1.45	0.469	2.92	0.390	7.09
9.5	2.15	4.17	1.36	0.450	2.79	0.358	7.24
10.5	2.07	4.38	1.28	0.435	2.67	0.333	7.38
12.5	1.95	4.78	1.15	0.411	2.49	0.294	7.61
14.5	1.86	5.16	1.05	0.394	2.36	0.266	7.79
16.5	1.78	5.52	0.978	0.380	2.24	0.245	7.94
18.5	1.72	5.88	0.910	0.369	2.15	0.227	8.06
20.5	1.67	6.21	0.854	0.361	2.07	0.214	8.17
25.5	1.57	7.03	0.743	0.344	1.91	0.189	8.37
30.5	1.51	7.80	0.666	0.334	1.80	0.173	8.52
40.5	1.42	9.26	0.563	0.320	1.66	0.153	8.71
50.5	1.37	10.6	0.492	0.311	1.57	0.140	8.84
60.5	1.32	12.0	0.439	0.305	1.50	0.131	8.94
80.5	1.27	14.5	0.367	0.296	1.41	0.120	9.07
110	1.22	18.3	0.296	0.288	1.32	0.109	9.21
$H = 10, V_\infty = 5000$							
1.0	5.85	1.44	4.77	1.33	6.96	2.20	4.26
1.2	5.29	1.55	4.31	1.15	6.68	1.88	4.61
1.5	4.68	1.70	3.81	0.967	6.38	1.54	5.09
2.5	3.56	2.10	2.87	0.635	5.70	0.954	6.31
3.5	2.98	2.43	2.37	0.484	5.25	0.689	7.21
4.5	2.63	2.71	2.06	0.400	4.91	0.542	7.91
5.5	2.38	2.96	1.85	0.347	4.65	0.450	8.48
6.5	2.20	3.19	1.68	0.310	4.43	0.385	8.95
7.5	2.06	3.40	1.56	0.282	4.24	0.337	9.37
8.5	1.94	3.60	1.45	0.261	4.08	0.301	9.73
9.5	1.84	3.79	1.36	0.244	3.92	0.271	10.0
10.5	1.76	3.97	1.29	0.230	3.80	0.249	10.3
12.5	1.63	4.31	1.16	0.209	3.57	0.213	10.8
14.5	1.53	4.63	1.07	0.194	3.38	0.188	11.2
16.5	1.45	4.92	0.999	0.183	3.23	0.169	11.5
18.5	1.39	5.21	0.936	0.175	3.09	0.154	11.8
20.5	1.33	5.48	0.884	0.168	2.97	0.143	12.0
25.5	1.24	6.13	0.793	0.156	2.76	0.124	12.5
30.5	1.18	6.73	0.725	0.148	2.60	0.111	12.8
40.5	1.08	7.86	0.625	0.138	2.36	0.0930	13.3
50.5	1.02	8.92	0.553	0.130	2.19	0.0818	13.7
60.5	0.973	9.91	0.497	0.125	2.05	0.0737	14.0
80.5	0.907	11.7	0.421	0.118	1.87	0.0636	14.4
100	0.864	13.5	0.368	0.114	1.74	0.0572	14.7

Table 7 Concluded

$\theta_b - 0^\circ$	$x_w$	$\epsilon \cdot 10$	$y_w$	$\eta_w \cdot 10$	$t_w \cdot 10$	$p_w$	$p_w \cdot 10$	$R_w$
$H = 10, V_\infty = 3000$								
1.0	6.20	1.53	4.75	1.59	5.53	2.34	3.48	
1.2	5.64	1.65	4.32	1.41	5.33	2.03	3.77	
1.5	5.02	1.81	3.84	1.21	5.08	1.69	4.14	
2.5	3.88	2.25	2.91	0.870	4.45	1.08	5.05	
3.5	3.29	2.60	2.41	0.708	4.03	0.808	5.66	
4.5	2.93	2.91	2.10	0.617	3.71	0.652	6.10	
5.5	2.68	3.20	1.87	0.556	3.46	0.549	6.46	
6.5	2.50	3.45	1.70	0.515	3.26	0.479	6.74	
7.5	2.36	3.70	1.56	0.484	3.09	0.428	6.96	
8.5	2.24	3.92	1.46	0.461	2.94	0.389	7.15	
9.5	2.15	4.14	1.36	0.442	2.82	0.357	7.31	
10.5	2.07	4.36	1.28	0.426	2.71	0.330	7.46	
12.5	1.94	4.76	1.16	0.402	2.53	0.292	7.70	
14.5	1.85	5.14	1.06	0.385	2.39	0.264	7.88	
16.5	1.77	5.50	0.985	0.372	2.28	0.243	8.03	
18.5	1.71	5.85	0.918	0.361	2.18	0.226	8.16	
20.5	1.66	6.19	0.861	0.352	2.10	0.212	8.27	
22.5	1.56	6.99	0.749	0.326	1.94	0.187	8.48	
34.5	1.49	7.76	0.670	0.325	1.82	0.170	8.63	
46.5	1.41	9.20	0.566	0.311	1.68	0.150	8.83	
58.5	1.35	10.5	0.496	0.302	1.58	0.137	8.97	
60.5	1.31	11.9	0.443	0.296	1.51	0.129	9.07	
62.5	1.26	14.4	0.370	0.268	1.42	0.117	9.21	
70.0	1.22	16.9	0.319	0.282	1.35	0.109	9.31	
$H = 30, V_\infty = 5000, R = 0$								
1.0	4.56	1.32	3.71	0.933	6.31	1.47	5.19	
1.1	4.35	1.36	3.54	0.868	6.18	1.36	5.39	
1.2	4.15	1.40	3.37	0.807	6.06	1.25	5.58	
1.3	3.99	1.44	3.23	0.761	5.96	1.17	5.76	
1.4	3.83	1.48	3.10	0.715	5.86	1.09	5.94	
1.5	3.71	1.52	3.00	0.680	5.78	1.03	6.09	
2.5	2.90	1.84	2.30	0.466	5.14	0.652	7.35	
3.5	2.48	2.11	1.93	0.369	4.72	0.483	8.23	
4.5	2.21	2.35	1.68	0.313	4.40	0.386	8.90	
5.5	2.02	2.56	1.52	0.277	4.15	0.324	9.44	
6.5	1.87	2.75	1.39	0.252	3.93	0.281	9.89	
7.5	1.76	2.93	1.28	0.233	3.75	0.248	10.2	
8.5	1.67	3.10	1.20	0.218	3.60	0.224	10.6	
9.5	1.59	3.27	1.12	0.205	3.46	0.203	10.9	
10.5	1.53	3.42	1.06	0.196	3.33	0.187	11.1	
11.5	1.48	3.57	1.02	0.190	3.24	0.176	11.3	
12.5	1.44	3.72	0.984	0.184	3.16	0.166	11.5	
13.5	1.41	3.86	0.949	0.180	3.09	0.158	11.6	
14.5	1.38	4.00	0.913	0.175	3.02	0.151	11.8	
15.5	1.35	4.14	0.887	0.171	2.95	0.144	11.9	
16.5	1.32	4.27	0.861	0.168	2.89	0.139	12.0	
17.5	1.30	4.41	0.837	0.165	2.83	0.134	12.1	
18.5	1.28	4.53	0.817	0.162	2.79	0.130	12.2	
19.5	1.26	4.66	0.799	0.160	2.75	0.126	12.3	
20.5	1.24	4.79	0.781	0.158	2.70	0.122	12.4	
25.5	1.17	5.39	0.708	0.149	2.53	0.108	12.8	
30.5	1.11	5.96	0.645	0.143	2.38	0.0978	13.1	
35.5	1.06	6.51	0.594	0.137	2.26	0.0895	13.3	
40.5	1.02	7.03	0.550	0.133	2.16	0.0828	13.5	
45.5	0.997	7.54	0.514	0.130	2.07	0.0774	13.7	
50.5	0.970	8.03	0.484	0.127	2.00	0.0732	13.9	
60.5	0.927	8.97	0.433	0.123	1.88	0.0664	14.1	
70.5	0.894	9.88	0.394	0.119	1.79	0.0615	14.3	
80.5	0.869	10.7	0.363	0.117	1.72	0.0579	14.5	

Table 8

 $\theta_b = 2^\circ.5, \gamma = 1.4$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\rho_w$	$\xi \cdot 10$	$y_w$	$\rho_w$
$M_\infty = \infty$						
1.0	5.92	1.54	6	6.53	1.64	4.09
1.2	5.35	1.65	6	6.00	1.76	3.93
1.5	4.73	1.80	6	5.41	1.93	3.71
2.5	3.55	2.21	6	4.32	2.41	3.18
3.5	2.95	2.53	6	3.76	2.81	2.83
4.5	2.56	2.80	6	3.42	3.17	2.58
5.5	2.30	3.04	6	3.19	3.50	2.39
6.5	2.09	3.26	6	3.02	3.81	2.25
7.5	1.94	3.47	6	2.89	4.10	2.14
8.5	1.81	3.65	6	2.78	4.39	2.04
9.5	1.70	3.83	6	2.70	4.66	1.97
10.5	1.61	4.00	6	2.62	4.93	1.90
12.5	1.47	4.30	6	2.51	5.44	1.79
14.5	1.35	4.59	6	2.42	5.93	1.71
16.5	1.28	4.85	6	2.35	6.41	1.65
18.5	1.22	5.10	6	2.30	6.88	1.59
20.5	1.17	5.34	6	2.26	7.33	1.55
25.5	1.06	5.90	6	2.17	8.44	1.47
30.5	0.981	6.41	6	2.11	9.51	1.41
40.5	0.860	7.32	6	2.03	11.5	1.33
50.5	0.775	8.14	6	1.97	13.5	1.27
60.5	0.711	8.88	6	1.94	15.5	1.24
80.5	0.621	10.2	6	1.89	19.3	1.19
100	0.562	11.3	6	1.86	23.0	1.16
$M_\infty = 6$						
1.0	6.16	1.58	5.07	7.20	1.76	3.13
1.2	5.61	1.69	4.96	6.69	1.90	2.98
1.5	5.00	1.85	4.80	6.13	2.09	2.80
2.5	3.86	2.29	4.33	5.08	2.64	2.38
3.5	3.28	2.64	3.96	4.55	3.12	2.12
4.5	2.92	2.95	3.67	4.22	3.56	1.96
5.5	2.68	3.23	3.43	4.00	3.97	1.83
6.5	2.49	3.49	3.23	3.83	4.36	1.74
7.5	2.35	3.73	3.07	3.71	4.74	1.67
8.5	2.23	3.96	2.93	3.61	5.10	1.61
9.5	2.14	4.18	2.81	3.52	5.46	1.56
10.5	2.06	4.39	2.70	3.46	5.81	1.53
12.5	1.94	4.79	2.52	3.35	6.49	1.46
14.5	1.84	5.17	2.38	3.26	7.15	1.41
16.5	1.77	5.53	2.27	3.20	7.79	1.37
18.5	1.71	5.88	2.17	3.15	8.43	1.34
20.5	1.66	6.22	2.09	3.11	9.05	1.32
25.5	1.56	7.02	1.93	3.03	10.5	1.27
30.5	1.49	7.78	1.83	2.97	12.0	1.23
40.5	1.41	9.24	1.69	2.89	15.0	1.19
50.5	1.35	10.6	1.59	2.84	17.8	1.16
60.5	1.31	11.9	1.52	2.81	20.6	1.14
80.5	1.25	14.5	1.42	2.76	26.2	1.11
100				2.73	31.7	1.09
110	1.20	18.2	1.33			

Table 9

 $\theta_b = 30^\circ$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$p_w$	$p_w \cdot 10$	$s_w$
$H = 30, V_\infty = 7500$							
1.0	5.46	1.38	4.74	1.17	9.53	2.06	5.39
1.2	4.91	1.48	4.25	1.00	8.94	1.74	5.87
1.5	4.34	1.62	3.72	0.825	8.14	1.40	6.39
2.5	3.31	2.00	2.77	0.526	6.72	0.855	7.52
3.5	2.77	2.30	2.29	0.390	6.16	0.611	8.50
4.5	2.43	2.56	1.99	0.313	5.80	0.474	9.37
5.5	2.19	2.79	1.78	0.265	5.52	0.390	10.1
6.5	2.02	3.00	1.62	0.231	5.29	0.330	10.7
7.5	1.88	3.19	1.50	0.207	5.10	0.287	11.3
8.5	1.77	3.38	1.40	0.188	4.92	0.254	11.8
9.5	1.67	3.55	1.31	0.173	4.77	0.228	12.2
10.5	1.59	3.71	1.24	0.161	4.63	0.207	12.6
12.5	1.48	4.02	1.14	0.144	4.42	0.179	13.3
14.5	1.40	4.31	1.06	0.133	4.26	0.159	13.8
16.5	1.33	4.58	1.00	0.124	4.12	0.144	14.2
18.5	1.27	4.84	0.954	0.117	3.98	0.132	14.6
20.5	1.23	5.09	0.908	0.111	3.86	0.122	15.0
25.5	1.13	5.68	0.815	0.100	3.62	0.103	15.8
30.5	1.05	6.23	0.745	0.0927	3.42	0.0903	16.4
40.5	0.956	7.23	0.647	0.0828	3.11	0.0735	17.3
50.5	0.890	8.15	0.581	0.0768	2.89	0.0635	17.9
60.5	0.840	9.02	0.530	0.0725	2.71	0.0564	18.5
80.5	0.770	10.6	0.456	0.0668	2.46	0.0470	19.2
100	0.721	12.1	0.403	0.0630	2.27	0.0410	19.8
$H = 30, V_\infty = 6000$							
1.0	5.63	1.40	4.75	1.25	8.12	2.13	4.89
1.2	5.10	1.51	4.28	1.08	7.52	1.81	5.22
1.5	4.52	1.65	3.76	0.896	6.99	1.47	5.63
2.5	3.43	2.04	2.81	0.576	6.11	0.899	6.82
3.5	2.87	2.36	2.32	0.433	5.64	0.645	7.81
4.5	2.52	2.62	2.02	0.353	5.30	0.505	8.59
5.5	2.28	2.86	1.81	0.302	5.02	0.415	9.25
6.5	2.10	3.08	1.65	0.267	4.80	0.354	9.80
7.5	1.96	3.29	1.52	0.240	4.60	0.308	10.2
8.5	1.84	3.48	1.42	0.220	4.43	0.274	10.7
9.5	1.75	3.66	1.33	0.205	4.28	0.247	11.0
10.5	1.67	3.83	1.26	0.192	4.15	0.225	11.4
12.5	1.54	4.15	1.14	0.173	3.92	0.192	11.9
14.5	1.46	4.45	1.06	0.161	3.74	0.171	12.4
16.5	1.39	4.73	0.999	0.151	3.60	0.155	12.8
18.5	1.33	5.01	0.945	0.144	3.47	0.142	13.1
20.5	1.28	5.27	0.898	0.138	3.36	0.132	13.4
25.5	1.19	5.88	0.806	0.126	3.13	0.113	13.9
30.5	1.12	6.46	0.740	0.119	2.95	0.100	14.4
40.5	1.02	7.53	0.644	0.109	2.69	0.0841	15.0
50.5	0.962	8.53	0.574	0.102	2.49	0.0733	15.5
60.5	0.912	9.46	0.521	0.0979	2.34	0.0656	15.8
80.5	0.843	11.2	0.443	0.0916	2.11	0.0556	16.4

Table 9 Continued

 $\theta_b = 2^\circ.5$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$p_w \cdot 10$	$s_w$
$H = 30, V_\infty = 5000$							
1.0	5.79	1.42	4.75	1.32	7.06	2.18	4.38
1.2	5.24	1.53	4.28	1.14	6.71	1.86	4.69
1.5	4.64	1.68	3.78	0.956	6.35	1.52	5.13
2.5	3.52	2.08	2.83	0.626	5.64	0.933	6.35
3.5	2.95	2.40	2.34	0.479	5.19	0.675	7.25
4.5	2.60	2.68	2.04	0.397	4.86	0.532	7.94
5.5	2.36	2.93	1.82	0.344	4.59	0.440	8.50
6.5	2.18	3.15	1.66	0.307	4.36	0.376	8.98
7.5	2.03	3.36	1.53	0.280	4.17	0.330	9.39
8.5	1.92	3.56	1.43	0.260	4.00	0.294	9.74
9.5	1.83	3.75	1.34	0.243	3.86	0.266	10.0
10.5	1.75	3.93	1.27	0.230	3.73	0.244	10.3
12.5	1.63	4.29	1.16	0.212	3.53	0.213	10.7
14.5	1.53	4.61	1.06	0.197	3.34	0.187	11.1
16.5	1.46	4.91	0.999	0.187	3.19	0.170	11.4
18.5	1.41	5.19	0.949	0.180	3.09	0.158	11.6
20.5	1.36	5.47	0.906	0.174	2.99	0.149	11.8
25.5	1.28	6.13	0.818	0.162	2.79	0.130	12.2
30.5	1.21	6.76	0.744	0.154	2.62	0.115	12.5
40.5	1.12	7.92	0.655	0.144	2.41	0.0997	13.0
50.5	1.05	9.01	0.573	0.135	2.21	0.0863	13.4
60.5	0.997	10.0	0.514	0.120	2.07	0.0774	13.7
80.5	0.928	11.9	0.434	0.123	1.88	0.0666	14.1
$H = 30, V_\infty = 4000$							
1.0	6.04	1.48	4.80	1.44	6.30	2.29	3.87
1.2	5.47	1.59	4.35	1.26	6.07	1.96	4.19
1.5	4.85	1.75	3.86	1.07	5.79	1.62	4.62
2.5	3.71	2.17	2.91	0.727	5.14	1.01	5.71
3.5	3.13	2.50	2.41	0.571	4.70	0.745	6.47
4.5	2.77	2.80	2.10	0.482	4.37	0.591	7.05
5.5	2.52	3.06	1.87	0.425	4.11	0.493	7.52
6.5	2.33	3.30	1.71	0.383	3.88	0.425	7.89
7.5	2.18	3.53	1.57	0.356	3.70	0.374	8.22
8.5	2.07	3.74	1.46	0.333	3.54	0.336	8.51
9.5	1.97	3.94	1.37	0.315	3.41	0.306	8.75
10.5	1.89	4.14	1.30	0.301	3.30	0.281	8.97
12.5	1.75	4.50	1.17	0.278	3.09	0.244	9.33
14.5	1.66	4.84	1.08	0.263	2.92	0.219	9.59
16.5	1.60	5.17	1.02	0.253	2.79	0.202	9.78
18.5	1.55	5.48	0.965	0.245	2.68	0.188	9.94
20.5	1.50	5.79	0.917	0.238	2.59	0.177	10.0
25.5	1.41	6.52	0.819	0.225	2.41	0.155	10.4
30.5	1.34	7.20	0.744	0.215	2.26	0.140	10.6
40.5	1.24	8.49	0.633	0.202	2.05	0.119	11.0
50.5	1.17	9.70	0.561	0.194	1.92	0.107	11.2
60.5	1.13	10.8	0.503	0.188	1.81	0.0978	11.4
80.5	1.06	12.0	0.421	0.180	1.66	0.0858	11.6

Table 9 Concluded

 $\theta_b = 2^\circ.5$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$\rho_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 3000$							
1.0	6.23	1.53	4.76	1.60	5.52	2.36	3.46
1.2	5.66	1.65	4.33	1.42	5.31	2.04	3.75
1.5	5.04	1.81	3.85	1.23	5.06	1.70	4.12
2.5	3.85	2.27	2.88	0.870	4.40	1.07	5.05
3.5	3.29	2.62	2.40	0.715	3.98	0.806	5.63
4.5	2.93	2.93	2.08	0.624	3.67	0.651	6.07
5.5	2.68	3.22	1.86	0.565	3.43	0.550	6.41
6.5	2.50	3.47	1.69	0.522	3.24	0.480	6.69
7.5	2.35	3.72	1.56	0.492	3.07	0.428	6.91
8.5	2.24	3.95	1.45	0.468	2.91	0.389	7.09
9.5	2.15	4.17	1.35	0.449	2.78	0.357	7.25
10.5	2.07	4.38	1.28	0.434	2.67	0.332	7.38
12.5	1.95	4.78	1.15	0.410	2.49	0.293	7.62
14.5	1.85	5.16	1.05	0.393	2.35	0.265	7.80
16.5	1.78	5.52	0.975	0.380	2.24	0.244	7.94
18.5	1.72	5.88	0.909	0.369	2.15	0.227	8.06
20.5	1.67	6.21	0.859	0.362	2.07	0.215	8.16
25.5	1.59	7.03	0.762	0.347	1.94	0.193	8.34
30.5	1.53	7.81	0.689	0.337	1.83	0.177	8.47
40.5	1.44	9.29	0.583	0.323	1.69	0.156	8.67
50.5	1.38	10.7	0.510	0.313	1.59	0.143	8.81
60.5	1.34	12.0	0.456	0.307	1.52	0.134	8.91
80.5	1.28	14.6	0.379	0.297	1.42	0.121	9.05
100	1.24	17.2	0.328	0.292	1.36	0.114	9.15

Table 10

 $\theta_b = 5^\circ, \gamma = 1.4$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\rho_w$	$\xi \cdot 10$	$y_w$	$\rho_w$	$\xi \cdot 10$	$y_w$	$\rho_w$	
$M_\infty = \infty$				$M_\infty = 15$				$M_\infty = 6$		
1.0	5.92	1.54	6	6.04	1.56	5.53	6.53	1.64	4.09	
1.2	5.36	1.65	6	5.48	1.58	5.47	6.00	1.76	3.93	
1.5	4.73	1.80	6	4.86	1.83	5.37	5.40	1.93	3.71	
2.5	3.55	2.21	6	3.70	2.25	5.06	4.31	2.41	3.18	
3.5	2.94	2.53	6	3.11	2.59	4.79	3.76	2.81	2.83	
4.5	2.56	2.80	6	2.74	2.88	4.55	3.42	3.17	2.58	
5.5	2.29	3.05	6	2.48	3.14	4.34	3.19	3.50	2.39	
6.5	2.09	3.26	6	2.29	3.38	4.15	3.02	3.81	2.25	
7.5	1.93	3.47	6	2.14	3.60	3.98	2.88	4.10	2.14	
8.5	1.81	3.65	6	2.02	3.81	3.83	2.78	4.39	2.04	
9.5	1.70	3.83	6	1.92	4.01	3.70	2.69	4.66	1.97	
10.5	1.61	3.99	6	1.84	4.20	3.58	2.62	4.93	1.90	
12.5	1.49	4.30	6	1.71	4.55	3.36	2.51	5.44	1.79	
14.5	1.41	4.59	6	1.61	4.88	3.20	2.42	5.93	1.71	
16.5	1.34	4.87	6	1.55	5.20	3.09	2.35	6.41	1.65	
18.5	1.27	5.13	6	1.50	5.51	2.99	2.30	6.88	1.59	
20.5	1.22	5.38	6	1.45	5.80	2.90	2.25	7.33	1.55	
25.5	1.11	5.97	6	1.36	6.51	2.70	2.17	8.44	1.46	
30.5	1.03	6.50	6	1.29	7.17	2.55	2.10	9.51	1.40	
40.5	0.912	7.47	6	1.19	8.41	2.32	2.03	11.5	1.33	
50.5	0.834	8.34	6	1.12	9.56	2.15	1.93	13.5	1.28	
60.5	0.781	9.15	6	1.07	10.6	2.03	1.95	15.5	1.25	
80.5	0.725	10.6	6	1.01	12.7	1.87	1.90	19.4	1.20	
100	0.701	12.0	6	0.970	14.7	1.77	1.87	23.1	1.17	
120	0.720	13.4	6	0.946	16.6	1.71	1.85	26.8	1.15	
140							1.83	30.5	1.13	
150	0.810	15.7	6	0.962	19.4	1.75	1.81	36.0	1.11	
170							1.81	36.0	1.11	
$M_\infty = 23$				$M_\infty = 10$				$M_\infty = 4$		
1.0	5.93	1.55	5.79	6.16	1.58	5.07	7.20	1.76	3.13	
1.2	5.42	1.66	5.75	5.61	1.69	4.96	6.69	1.90	2.98	
1.5	4.79	1.82	5.71	5.00	1.83	4.79	6.13	2.09	2.80	
2.5	3.62	2.23	5.54	3.86	2.29	4.33	5.08	2.64	2.38	
3.5	3.02	2.56	5.39	3.28	2.64	3.96	4.55	3.12	2.12	
4.5	2.66	2.84	5.24	2.92	2.95	3.67	4.22	3.56	1.95	
5.5	2.38	3.09	5.10	2.67	3.23	3.43	4.00	3.97	1.83	
6.5	2.19	3.32	4.97	2.49	3.49	3.23	3.83	4.36	1.74	
7.5	2.03	3.53	4.84	2.35	3.73	3.07	3.71	4.74	1.67	
8.5	1.91	3.73	4.73	2.23	3.96	2.92	3.61	5.10	1.61	
9.5	1.80	3.91	4.62	2.14	4.18	2.80	3.52	5.46	1.56	
10.5	1.72	4.09	4.51	2.06	4.39	2.70	3.45	5.81	1.52	
12.5	1.58	4.42	4.33	1.94	4.79	2.52	3.34	6.49	1.46	
14.5	1.50	4.73	4.21	1.84	5.17	2.38	3.26	7.15	1.41	
16.5	1.44	5.03	4.09	1.77	5.53	2.27	3.20	7.79	1.37	
18.5	1.38	5.31	3.93	1.71	5.88	2.18	3.15	8.43	1.34	
20.5	1.33	5.58	3.83	1.67	6.22	2.12	3.10	9.05	1.32	
25.5	1.23	6.22	3.67	1.59	7.04	1.99	2.02	10.5	1.27	
30.5	1.15	6.82	3.49	1.53	7.82	1.88	2.97	12.0	1.23	
40.5	1.04	7.91	3.20	1.44	9.30	1.74	2.89	15.0	1.19	
50.5	0.973	8.92	2.93	1.28	10.7	1.63	2.84	17.8	1.16	
60.5	0.921	9.87	2.92	1.24	12.0	1.56	2.80	20.6	1.13	
80.5	0.855	11.6	2.63	1.23	14.6	1.46	2.76	26.2	1.11	
100	0.821	13.0	2.42	1.24	17.2	1.39	2.73	31.7	1.09	
120	0.813	14.9	2.23	1.24	19.3	1.35	2.71	37.1	1.08	
150	0.894	17.7	2.72	1.18	23.2	1.30	2.68	43.2	1.06	

Table 11

$\theta_b = 5^\circ$	$i_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$p_w$	$p_w \cdot 10$	$\beta_w$
$H = 60, V_\infty = 10\ 000$								
1.0	5.21	1.33	4.64	1.08	11.4	1.95	6.24	
1.2	4.66	1.43	4.15	0.910	11.0	1.63	6.71	
1.5	4.04	1.56	3.62	0.722	11.1	1.28	7.83	
2.5	3.03	1.90	2.66	0.442	8.92	0.757	9.69	
3.5	2.55	2.18	2.19	0.327	7.45	0.539	10.5	
4.5	2.26	2.42	1.90	0.263	6.64	0.421	11.1	
5.5	2.04	2.64	1.70	0.221	6.19	0.344	11.6	
6.5	1.88	2.83	1.55	0.191	5.90	0.291	12.3	
7.5	1.75	3.01	1.43	0.169	5.69	0.252	12.9	
8.5	1.64	3.18	1.34	0.153	5.51	0.223	13.5	
9.5	1.57	3.34	1.27	0.141	5.38	0.203	13.9	
10.5	1.51	3.50	1.21	0.130	5.27	0.188	14.3	
12.5	1.41	3.79	1.13	0.119	5.08	0.164	15.0	
14.5	1.33	4.07	1.06	0.109	4.92	0.147	15.6	
16.5	1.27	4.33	1.00	0.102	4.77	0.134	16.1	
18.5	1.22	4.58	0.957	0.0957	4.65	0.123	16.6	
20.5	1.17	4.82	0.914	0.0903	4.53	0.113	17.0	
25.5	1.08	5.38	0.826	0.0800	4.28	0.0958	18.0	
30.5	1.01	5.90	0.760	0.0729	4.07	0.0835	18.8	
40.5	0.925	6.85	0.680	0.0649	3.80	0.0698	19.8	
50.5	0.876	7.76	0.633	0.0606	3.63	0.0624	20.4	
60.5	0.839	8.62	0.599	0.0576	3.50	0.0573	20.9	
70.5	0.815	9.45	0.575	0.0556	3.41	0.0539	21.3	
80.5	0.801	10.2	0.561	0.0545	3.36	0.0520	21.5	
$H = 60, V_\infty = 7500$								
1.0	5.30	1.35	4.68	1.13	10.6	2.00	5.90	
1.2	4.76	1.45	4.18	0.963	9.83	1.67	6.40	
1.5	4.20	1.58	3.65	0.788	8.79	1.34	6.92	
2.55	3.18	1.96	2.67	0.497	6.75	0.799	7.95	
3.55	2.68	2.25	2.21	0.373	6.03	0.575	8.71	
4.55	2.36	2.50	1.92	0.302	5.65	0.449	9.53	
5.55	2.13	2.73	1.72	0.256	5.36	0.368	10.2	
6.55	1.96	2.93	1.57	0.225	5.13	0.312	10.8	
7.55	1.83	3.12	1.45	0.202	4.93	0.272	11.4	
8.55	1.73	3.30	1.36	0.185	4.77	0.243	11.8	
9.55	1.66	3.47	1.29	0.174	4.65	0.224	12.2	
10.5	1.60	3.63	1.24	0.165	4.54	0.208	12.5	
12.5	1.50	3.94	1.14	0.150	4.34	0.183	13.0	
14.5	1.42	4.23	1.07	0.139	4.18	0.163	13.5	
15.5	1.35	4.51	1.01	0.130	4.03	0.148	13.9	
18.5	1.29	4.78	0.960	0.123	3.90	0.136	14.3	
20.5	1.24	5.03	0.914	0.117	3.78	0.126	14.6	
25.5	1.15	5.63	0.825	0.106	3.54	0.107	15.3	
30.5	1.09	6.19	0.765	0.100	3.37	0.0961	15.8	
40.5	1.00	7.24	0.680	0.0915	3.13	0.0816	16.5	
50.5	0.946	8.21	0.622	0.0857	2.94	0.0718	17.0	
60.5	0.903	9.13	0.579	0.0818	2.79	0.0653	17.4	
80.5	0.855	10.89	0.529	0.0773	2.63	0.0533	17.9	

Table 11 Continued

$\theta_b = 5^\circ$	$x_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$p_w$	$p_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 7500$								
1.0	5.45	1.38	4.73	1.17	9.53	2.06	5.39	
1.2	4.92	1.48	4.25	1.00	8.94	1.74	5.86	
1.5	4.34	1.62	3.72	0.824	8.14	1.40	6.39	
2.5	3.31	2.00	2.77	0.526	6.72	0.855	7.53	
3.5	2.77	2.30	2.29	0.389	6.16	0.610	8.50	
4.5	2.43	2.56	1.99	0.313	5.80	0.475	9.37	
5.5	2.19	2.79	1.78	0.264	5.52	0.389	10.1	
6.5	2.01	3.00	1.62	0.231	5.29	0.329	10.7	
7.5	1.88	3.19	1.50	0.206	5.09	0.286	11.3	
8.5	1.77	3.38	1.40	0.188	4.93	0.255	11.8	
9.5	1.69	3.55	1.33	0.176	4.81	0.234	12.1	
10.5	1.63	3.72	1.28	0.166	4.70	0.217	12.4	
12.5	1.53	4.03	1.18	0.151	4.51	0.190	13.0	
14.5	1.44	4.33	1.11	0.139	4.35	0.170	13.5	
16.5	1.37	4.61	1.04	0.130	4.21	0.154	13.9	
18.5	1.31	4.88	0.991	0.122	4.08	0.141	14.3	
20.5	1.26	5.14	0.944	0.116	3.96	0.130	14.7	
25.5	1.17	5.75	0.853	0.104	3.72	0.111	15.4	
30.5	1.10	6.32	0.792	0.0978	3.55	0.0989	16.0	
40.5	1.01	7.37	0.702	0.0881	3.28	0.0826	16.8	
50.5	0.945	8.35	0.637	0.0819	3.08	0.0720	17.4	
60.5	0.901	9.27	0.592	0.0778	2.93	0.0651	17.8	
80.5	0.848	11.0	0.538	0.0732	2.74	0.0575	18.4	
90.5	0.833	11.8	0.522	0.0719	2.69	0.0554	18.5	
$H = 30, V_\infty = 6000$								
1.0	5.63	1.40	4.75	1.25	8.12	2.13	4.89	
1.2	5.10	1.51	4.27	1.07	7.52	1.81	5.22	
1.5	4.52	1.65	3.76	0.895	6.99	1.47	5.63	
2.5	3.42	2.04	2.81	0.575	6.10	0.896	6.82	
3.5	2.87	2.36	2.32	0.432	5.64	0.644	7.81	
4.5	2.52	2.62	2.02	0.352	5.29	0.503	8.60	
5.5	2.28	2.86	1.80	0.301	5.02	0.414	9.25	
6.5	2.10	3.08	1.64	0.266	4.79	0.353	9.80	
7.5	1.95	3.29	1.52	0.240	4.60	0.307	10.2	
8.5	1.84	3.48	1.41	0.220	4.43	0.273	10.7	
9.5	1.75	3.66	1.33	0.205	4.29	0.247	11.0	
10.5	1.69	3.83	1.27	0.195	4.18	0.229	11.3	
12.5	1.58	4.15	1.17	0.178	3.98	0.201	11.8	
14.5	1.49	4.46	1.09	0.166	3.82	0.180	12.2	
16.5	1.42	4.75	1.03	0.156	3.68	0.164	12.6	
18.5	1.37	5.03	0.983	0.149	3.56	0.151	12.8	
20.5	1.33	5.30	0.942	0.143	3.47	0.142	13.1	
25.5	1.24	5.95	0.856	0.132	3.26	0.123	13.6	
30.5	1.17	6.55	0.790	0.125	3.09	0.110	14.0	
40.5	1.07	7.67	0.691	0.114	2.82	0.0921	14.7	
50.5	1.00	8.71	0.622	0.107	2.63	0.0806	15.1	
60.5	0.961	9.69	0.573	0.102	2.49	0.0731	15.5	
80.5	0.903	11.5	0.511	0.0971	2.31	0.0643	15.9	

Table 11 Continued

$\theta_b = 5^\circ$	$x_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$p_w$	$p_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 5000$								
	5.79	1.42	4.75	1.32	7.06	2.13	4.38	
	5.24	1.53	4.28	1.14	6.71	1.86	4.69	
	..64	1.68	3.78	0.956	6.35	1.52	5.13	
	3.51	2.08	2.83	0.626	5.64	0.933	6.35	
	2.95	2.40	2.34	0.479	5.19	0.675	7.25	
	2.60	2.68	2.04	0.397	4.86	0.532	7.94	
	2.36	2.92	1.82	0.344	4.59	0.440	8.50	
	2.18	3.15	1.66	0.307	4.36	0.376	8.98	
	2.03	3.36	1.53	0.280	4.17	0.329	9.39	
	1.92	3.56	1.43	0.259	4.00	0.294	9.74	
	1.83	3.75	1.34	0.243	3.86	0.266	10.0	
	1.75	3.93	1.27	0.230	3.73	0.244	10.3	
	1.64	4.27	1.17	0.214	3.55	0.216	10.7	
	1.57	4.59	1.10	0.203	3.41	0.197	11.0	
	1.51	4.90	1.04	0.194	3.30	0.182	11.2	
	1.46	5.19	0.997	0.186	3.19	0.170	11.4	
	1.41	5.48	0.953	0.180	3.09	0.159	11.6	
	1.32	5.17	0.860	0.168	2.89	0.139	12.0	
	1.25	5.81	0.788	0.159	2.72	0.124	12.4	
	1.15	8.01	0.682	0.147	2.47	0.104	12.9	
	1.08	9.12	0.610	0.139	2.30	0.0921	13.2	
	1.03	10.1	0.558	0.134	2.18	0.0839	13.5	
	1.00	11.2	0.519	0.130	2.08	0.0781	13.7	
$H = 30, V_\infty = 4000$								
	6.04	1.48	4.80	1.44	6.30	2.29	3.87	
	5.47	1.59	4.26	1.26	6.07	1.96	4.19	
	4.85	1.75	3.86	1.07	5.79	1.62	4.62	
	3.70	2.17	2.91	0.726	5.14	1.01	5.71	
	3.13	2.51	2.41	0.570	4.70	0.744	6.48	
	2.77	2.80	2.10	0.482	4.37	0.591	7.05	
	2.51	3.06	1.87	0.425	4.11	0.492	7.52	
	2.33	3.30	1.70	0.385	3.88	0.424	7.90	
	2.18	3.53	1.57	0.355	3.70	0.374	8.23	
	2.06	3.74	1.46	0.333	3.54	0.335	8.51	
	1.97	3.94	1.37	0.315	3.41	0.305	8.76	
	1.89	4.14	1.30	0.301	3.30	0.282	8.96	
	1.79	4.50	1.20	0.284	3.14	0.253	9.23	
	1.71	4.85	1.13	0.270	3.00	0.231	9.46	
	1.64	5.19	1.06	0.260	2.87	0.213	9.65	
	1.59	5.51	1.00	0.251	2.76	0.198	9.82	
	1.54	5.83	0.956	0.244	2.67	0.186	9.97	
	1.44	6.57	0.854	0.229	2.48	0.163	10.2	
	1.37	7.28	0.777	0.219	2.33	0.146	10.5	
	1.27	8.59	0.667	0.206	2.12	0.125	10.8	
	1.20	9.83	0.592	0.197	1.98	0.112	11.1	
	1.15	11.0	0.537	0.191	1.87	0.103	11.3	

Table 11 Continued

 $\theta_b = 5^\circ$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$p_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 3000$							
1.0	6.23	1.53	4.76	1.60	5.52	2.36	3.46
1.2	5.66	1.65	4.33	1.42	5.32	2.04	3.75
1.5	5.03	1.81	3.84	1.22	5.05	1.69	4.12
2.55	3.85	2.27	2.88	0.870	4.40	1.07	5.05
3.55	3.28	2.63	2.39	0.714	3.98	0.804	5.63
4.55	2.93	2.93	2.08	0.624	3.67	0.650	6.07
5.55	2.68	3.21	1.86	0.564	3.42	0.550	5.41
6.55	2.49	3.47	1.69	0.522	3.24	0.480	5.69
7.55	2.35	3.72	1.55	0.491	3.06	0.427	5.91
8.55	2.24	3.95	1.45	0.468	2.91	0.388	7.09
9.55	2.15	4.17	1.35	0.449	2.78	0.357	7.25
10.5	2.07	4.38	1.27	0.434	2.67	0.332	7.39
12.5	1.95	4.78	1.15	0.410	2.49	0.293	7.62
14.5	1.87	5.16	1.06	0.396	2.37	0.269	7.77
16.5	1.80	5.53	1.00	0.384	2.28	0.251	7.89
18.5	1.75	5.89	0.944	0.375	2.20	0.236	8.00
20.5	1.71	6.23	0.895	0.367	2.13	0.224	8.09
25.5	1.62	7.06	0.798	0.352	1.99	0.201	8.27
30.5	1.55	7.86	0.723	0.342	1.88	0.184	8.41
40.5	1.46	9.37	0.615	0.327	1.73	0.162	8.61
50.5	1.40	10.8	0.540	0.317	1.63	0.148	8.75
60.5	1.36	12.1	0.485	0.310	1.56	0.139	8.85
70.5	1.33	13.5	0.442	0.305	1.50	0.131	8.93
$H = 10, V_\infty = 5000$							
1.0	5.84	1.44	4.77	1.33	6.96	2.20	4.26
1.2	5.28	1.55	4.31	1.15	6.68	1.88	4.61
1.5	4.67	1.70	3.81	0.964	6.38	1.53	5.09
2.5	3.55	2.10	2.86	0.633	5.69	0.950	6.31
3.5	2.98	2.43	2.37	0.484	5.25	0.688	7.21
4.5	2.63	2.71	2.06	0.399	4.91	0.541	7.91
5.5	2.38	2.96	1.84	0.345	4.65	0.447	8.48
6.5	2.19	3.19	1.68	0.308	4.43	0.382	8.97
7.5	2.05	3.40	1.55	0.280	4.24	0.335	9.38
8.5	1.93	3.60	1.44	0.259	4.07	0.298	9.74
9.5	1.84	3.79	1.36	0.242	3.92	0.270	10.0
10.5	1.76	3.97	1.29	0.230	3.80	0.243	10.3
12.5	1.66	4.31	1.19	0.214	3.63	0.221	10.7
14.5	1.59	4.64	1.12	0.202	3.49	0.201	11.0
16.5	1.52	4.95	1.06	0.192	3.36	0.185	11.2
18.5	1.46	5.25	1.01	0.185	3.25	0.171	11.5
20.5	1.42	5.53	0.964	0.178	3.15	0.160	11.7
25.5	1.32	6.22	0.868	0.163	2.94	0.139	12.1
30.5	1.25	6.86	0.795	0.156	2.77	0.124	12.5
40.5	1.14	8.06	0.689	0.144	2.52	0.104	13.0
50.5	1.08	9.17	0.617	0.136	2.34	0.0913	13.4
60.5	1.03	10.2	0.564	0.131	2.21	0.0834	13.5
80.5	0.970	12.2	0.493	0.124	2.04	0.0732	14.0

Table 11 Continued

$x_w$	$\xi \cdot 10$	$y_w$	$\tau_w \cdot 10$	$i_w \cdot 10$	$p_w$	$p_w \cdot 10$	$\beta_w$
$H = 10, V_\infty = 3000$							
1.0	6.20	1.53	4.75	1.59	5.53	2.34	3.48
1.2	5.63	1.65	4.32	1.41	5.33	2.03	3.77
1.5	5.01	1.81	3.84	1.21	5.08	1.68	4.15
2.5	3.87	2.25	2.90	0.868	4.45	1.08	5.05
3.5	3.29	2.60	2.41	0.708	4.03	0.808	5.56
4.5	2.93	2.91	2.09	0.616	3.71	0.651	6.11
5.5	2.68	3.19	1.87	0.556	3.46	0.549	6.46
6.5	2.49	3.45	1.70	0.511	3.26	0.478	6.74
7.5	2.35	3.69	1.56	0.484	3.09	0.427	6.96
8.5	2.24	3.92	1.45	0.460	2.94	0.387	7.15
9.5	2.14	4.14	1.36	0.441	2.81	0.356	7.32
10.5	2.07	4.35	1.28	0.425	2.71	0.330	7.46
12.5	1.94	4.76	1.15	0.401	2.53	0.291	7.70
14.5	1.85	5.13	1.06	0.386	2.40	0.263	7.87
16.5	1.79	5.50	1.00	0.375	2.30	0.247	7.99
18.5	1.74	5.85	0.949	0.366	2.22	0.233	8.10
20.5	1.70	6.20	0.900	0.358	2.15	0.221	8.19
25.5	1.61	7.02	0.802	0.344	2.01	0.198	8.38
30.5	1.54	7.81	0.728	0.333	1.91	0.182	8.52
40.5	1.45	9.31	0.619	0.318	1.75	0.160	8.73
50.5	1.39	10.7	0.544	0.308	1.65	0.146	8.87
60.5	1.35	12.1	0.489	0.302	1.57	0.136	8.98
80.5	1.29	14.7	0.412	0.292	1.47	0.123	9.13
100	1.25	17.2	0.359	0.286	1.40	0.115	9.23
120	1.22	19.7	0.323	0.282	1.36	0.110	9.30
150	1.20	23.4	0.284	0.278	1.31	0.105	9.38
$H = 30, V_\infty = 5000, \bar{R} = 0$							
1.0	4.56	1.32	3.71	0.932	6.30	1.47	5.19
1.1	4.34	1.36	3.53	0.864	6.17	1.35	5.40
1.2	4.14	1.40	3.36	0.807	6.06	1.25	5.59
1.3	3.97	1.44	3.22	0.756	5.95	1.16	5.77
1.4	3.83	1.48	3.10	0.715	5.86	1.09	5.94
1.5	3.69	1.52	2.98	0.676	5.77	1.02	6.11
2.5	2.89	1.84	2.29	0.463	5.14	0.647	7.37
3.5	2.47	2.11	1.92	0.367	4.71	0.479	8.25
4.5	2.20	2.34	1.68	0.312	4.39	0.384	8.92
5.5	2.01	2.55	1.51	0.275	4.14	0.322	9.47
6.5	1.87	2.75	1.38	0.251	3.93	0.280	9.89
7.5	1.80	2.93	1.31	0.238	3.81	0.258	10.1
8.5	1.72	3.11	1.21	0.226	3.68	0.237	10.4
9.5	1.66	3.28	1.18	0.216	3.57	0.219	10.6
10.5	1.61	3.44	1.14	0.209	3.49	0.207	10.8
11.5	1.57	3.60	1.11	0.203	3.42	0.198	10.9
12.5	1.54	3.76	1.07	0.198	3.36	0.190	11.1
13.5	1.51	3.91	1.04	0.193	3.29	0.182	11.2
14.5	1.48	4.06	1.01	0.189	3.23	0.174	11.4
15.5	1.44	4.20	0.984	0.185	3.16	0.167	11.5
16.5	1.42	4.35	0.956	0.181	3.10	0.160	11.6
17.5	1.39	4.49	0.930	0.177	3.04	0.154	11.7

Table 11 Concluded

$x_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$p_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 5000, R = 0$							
18.5	1.36	4.63	0.905	0.174	2.99	0.148	11.8
19.5	1.34	4.76	0.881	0.170	2.93	0.143	11.9
20.5	1.32	4.90	0.859	0.168	2.88	0.138	12.0
21.5	1.30	5.03	0.838	0.165	2.84	0.134	12.1
22.5	1.28	5.16	0.818	0.162	2.79	0.130	12.2
23.5	1.26	5.28	0.800	0.160	2.75	0.126	12.3
24.5	1.24	5.41	0.783	0.158	2.71	0.123	12.4
25.5	1.23	5.53	0.767	0.156	2.67	0.119	12.5
26.5	1.21	5.65	0.751	0.154	2.64	0.117	12.6
27.5	1.20	5.78	0.736	0.153	2.60	0.114	12.6
28.5	1.18	5.90	0.722	0.151	2.57	0.111	12.7
29.5	1.17	6.01	0.710	0.150	2.54	0.109	12.8
30.5	1.16	6.13	0.697	0.148	2.51	0.107	12.8
35.5	1.11	6.70	0.645	0.143	2.38	0.0978	13.1
40.5	1.07	7.25	0.604	0.138	2.29	0.0912	13.3
45.5	1.04	7.78	0.572	0.135	2.21	0.0861	13.4
50.5	1.02	8.30	0.545	0.133	2.15	0.0819	13.6
60.5	0.985	9.30	0.501	0.129	2.04	0.0755	13.8

Table 12

 $\theta_b = 10^\circ, \gamma = 1.4$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\rho_w$	$\xi \cdot 10$	$y_w$	$\rho_w$	$\xi \cdot 10$	$y_w$	$\rho_w$
$M_\infty = \infty$									
1.0	5.93	1.54	6	6.05	1.56	5.54	6.55	1.64	4.10
1.2	5.37	1.65	6	5.50	1.67	5.47	6.01	1.76	3.93
1.5	4.74	1.80	6	4.88	1.83	5.37	5.43	1.93	3.72
2.0	4.04	2.02	6	4.18	2.06	5.21	4.76	2.18	3.42
2.5	3.57	2.21	6	3.71	2.25	5.06	4.32	2.41	3.18
3.0	3.23	2.38	6	3.38	2.43	4.92	4.01	2.62	2.99
3.5	2.96	2.53	6	3.12	2.59	4.79	3.78	2.81	2.84
4.0	2.74	2.67	6	2.92	2.74	4.67	3.58	3.00	2.70
4.5	2.57	2.81	6	2.74	2.88	4.55	3.44	3.17	2.59
5	2.43	2.93	6	2.61	3.02	4.45	3.30	3.34	2.49
6	2.20	3.16	6	2.39	3.27	4.25	3.10	3.66	2.32
7	2.06	3.37	6	2.23	3.50	4.08	2.96	3.96	2.20
8	1.97	3.58	6	2.12	3.71	3.96	2.84	4.25	2.09
9	1.90	3.77	6	2.05	3.92	3.88	2.75	4.53	2.01
10	1.83	3.96	6	1.99	4.13	3.80	2.66	4.80	1.93
12	1.72	4.31	6	1.89	4.52	3.66	2.55	5.32	1.83
14	1.63	4.65	6	1.81	4.89	3.54	2.49	5.83	1.77
16	1.57	4.97	6	1.75	5.24	3.43	2.44	6.32	1.72
18	1.52	5.28	6	1.70	5.59	3.35	2.39	6.80	1.68
20	1.49	5.58	6	1.66	5.93	3.29	2.35	7.28	1.65
25	1.50	6.33	6	1.63	6.75	3.22	2.29	8.44	1.58
30	1.55	7.09	6	1.67	7.57	3.31	2.25	9.58	1.55
35	1.66	7.89	6	1.77	8.44	3.46	2.26	10.7	1.55
40	1.79	8.76	6	1.87	9.35	3.62	2.35	11.8	1.64
$M_\infty = 15$									
1.0	5.99	1.55	5.79	6.17	1.58	5.07	7.22	1.76	3.13
1.2	5.43	1.66	5.76	5.63	1.69	4.96	6.72	1.90	2.99
1.5	4.81	1.82	5.71	5.01	1.85	4.80	6.15	2.09	2.80
2.0	4.11	2.04	5.63	4.33	2.09	4.55	5.52	2.38	2.56
2.5	3.64	2.23	5.55	3.88	2.29	4.33	5.10	2.64	2.38
3.0	3.30	2.40	5.47	3.55	2.47	4.14	4.80	2.89	2.25
3.5	3.04	2.56	5.39	3.29	2.65	3.96	4.56	3.13	2.13
4.0	2.83	2.71	5.32	3.10	2.80	3.81	4.39	3.35	2.04
4.5	2.65	2.85	5.24	2.93	2.96	3.67	4.23	3.56	1.96
5	2.51	2.97	5.17	2.80	3.10	3.55	4.12	3.77	1.90
6	2.29	3.21	5.04	2.59	3.37	3.33	3.92	4.17	1.79
7	2.13	3.43	4.93	2.42	3.62	3.15	3.79	4.55	1.72
8	2.04	3.64	4.85	2.29	3.85	3.00	3.66	4.93	1.64
9	1.97	3.84	4.79	2.22	4.08	2.91	3.58	5.29	1.60
10	1.91	4.04	4.73	2.17	4.30	2.84	3.50	5.64	1.55
12	1.80	4.41	4.61	2.08	4.72	2.72	3.39	6.33	1.49
14	1.72	4.76	4.51	2.00	5.13	2.61	3.30	7.00	1.43
16	1.65	5.10	4.43	1.94	5.53	2.52	3.23	7.64	1.39
18	1.60	5.43	4.36	1.89	5.91	2.45	3.19	8.27	1.37
20	1.57	5.74	4.31	1.85	6.29	2.39	3.14	8.89	1.34
25	1.55	6.52	4.27	1.80	7.20	2.31	3.03	10.4	1.27
30	1.60	7.31	4.36	1.81	8.10	2.34	3.01	11.9	1.26
35	1.70	8.14	4.49	1.91	9.03	2.47	2.98	13.4	1.24
40	1.82	9.02	4.63	2.00	10.0	2.61	2.95	14.9	1.23
$M_\infty = 6$									
$M_\infty = 10$									
$M_\infty = 4$									

Table 13

 $\theta_b = 10^\circ$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$p_w \cdot 10$	$\beta_w$
$H = 60, V_\infty = 10\ 000$							
1.0	5.22	1.33	4.65	1.08	11.4	1.96	6.24
1.2	4.66	1.43	4.16	0.912	11.1	1.63	6.74
1.5	4.04	1.56	3.62	0.722	11.1	1.28	7.84
2.0	3.43	1.74	3.05	0.547	10.0	0.956	9.00
2.5	3.03	1.91	2.66	0.441	8.91	0.755	9.69
3.0	2.75	2.05	2.39	0.373	8.05	0.627	10.1
3.5	2.55	2.18	2.19	0.327	7.45	0.539	10.5
4.0	2.39	2.30	2.03	0.292	7.00	0.474	10.8
4.5	2.26	2.42	1.91	0.264	6.66	0.422	11.1
5	2.16	2.53	1.81	0.243	6.41	0.384	11.3
6	2.02	2.74	1.68	0.216	6.14	0.336	11.7
7	1.92	2.94	1.59	0.199	5.97	0.304	12.1
8	1.84	3.13	1.52	0.185	5.84	0.280	12.4
9	1.78	3.31	1.46	0.174	5.74	0.260	12.7
10	1.72	3.48	1.41	0.165	5.65	0.245	13.0
12	1.63	3.82	1.32	0.150	5.48	0.219	13.6
14	1.56	4.14	1.26	0.140	5.36	0.201	14.0
16	1.54	4.45	1.25	0.138	5.34	0.197	14.1
18	1.57	4.76	1.27	0.141	5.38	0.203	13.9
20	1.60	5.08	1.30	0.146	5.43	0.211	13.7
25	1.70	5.90	1.39	0.162	5.61	0.239	13.1
30	1.84	6.79	1.52	0.185	5.85	0.280	12.4
35	1.92	7.73	1.59	0.199	5.97	0.304	12.1
40	1.95	8.71	1.61	0.203	6.02	0.313	12.0
$H = 60, V_\infty = 7500$							
1.0	5.31	1.35	4.68	1.13	10.6	2.00	5.89
1.2	4.76	1.45	4.18	0.963	9.83	1.67	6.40
1.5	4.21	1.58	3.66	0.792	8.81	1.35	6.91
2.05	3.57	1.79	3.04	0.602	7.49	0.999	7.54
2.55	3.19	1.96	2.68	0.500	6.78	0.805	7.95
3.05	2.91	2.11	2.42	0.425	6.33	0.674	8.32
3.55	2.69	2.25	2.22	0.376	6.04	0.579	8.71
4.05	2.51	2.38	2.06	0.335	5.83	0.507	9.11
4.55	2.37	2.50	1.93	0.305	5.66	0.453	9.50
5.05	2.27	2.62	1.84	0.284	5.54	0.416	9.80
6.05	2.12	2.84	1.71	0.255	5.36	0.365	10.2
7.05	2.02	3.05	1.62	0.235	5.21	0.331	10.6
8.05	1.93	3.24	1.54	0.219	5.08	0.302	11.0
9.05	1.85	3.43	1.47	0.206	4.97	0.279	11.3
10	1.78	3.62	1.41	0.195	4.86	0.259	11.6
12	1.69	3.96	1.32	0.179	4.70	0.232	12.0
14	1.64	4.30	1.28	0.172	4.62	0.220	12.2
16	1.62	4.62	1.26	0.169	4.58	0.215	12.4
18	1.61	4.95	1.25	0.168	4.57	0.212	12.4
20	1.62	5.27	1.26	0.168	4.58	0.214	12.4
22	1.63	5.60	1.27	0.171	4.61	0.218	12.3
24	1.66	5.93	1.29	0.175	4.65	0.225	12.2
26	1.70	6.27	1.33	0.181	4.72	0.236	12.0
28	1.75	6.61	1.38	0.189	4.81	0.250	11.7
30	1.80	6.97	1.42	0.197	4.89	0.264	11.5
33	1.86	7.52	1.48	0.208	4.99	0.282	11.2

Table 13 Continued

$\theta_b - 10^\circ$	$x_w$	$E \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$p_w$	$p \cdot 10$	$\beta_w$
$H = 30, V_\infty = 7500$								
1.0	5.46	1.38	4.74	1.17	9.53	2.06	5.39	
1.2	4.93	1.48	4.26	1.00	8.95	1.75	5.85	
1.5	4.36	1.62	3.74	0.831	8.15	1.41	6.37	
2.0	3.73	1.82	3.15	0.642	7.27	1.06	7.01	
2.5	3.32	2.00	2.78	0.530	6.73	0.861	7.51	
3.0	3.02	2.16	2.51	0.450	6.41	0.718	8.00	
3.5	2.78	2.30	2.30	0.392	6.17	0.615	8.48	
4.0	2.58	2.44	2.13	0.347	5.96	0.534	8.95	
4.5	2.44	2.56	2.00	0.315	5.80	0.477	9.35	
5	2.32	2.68	1.90	0.291	5.67	0.436	9.69	
6	2.17	2.90	1.76	0.260	5.49	0.381	10.1	
7	2.06	3.12	1.66	0.239	5.35	0.344	10.5	
8	1.97	3.32	1.58	0.222	5.22	0.314	10.9	
9	1.89	3.51	1.51	0.208	5.11	0.290	11.2	
10	1.82	3.70	1.44	0.196	5.00	0.269	11.5	
12	1.71	4.05	1.35	0.179	4.84	0.239	12.0	
14	1.66	4.39	1.30	0.171	4.75	0.225	12.3	
16	1.62	4.72	1.27	0.165	4.69	0.215	12.5	
18	1.60	5.04	1.25	0.161	4.65	0.209	12.6	
20	1.59	5.36	1.24	0.160	4.63	0.207	12.6	
25	1.63	6.17	1.27	0.166	4.70	0.216	12.5	
30	1.73	7.01	1.37	0.182	4.87	0.245	11.9	
35	1.84	7.90	1.47	0.200	5.04	0.276	11.4	
40	1.92	8.85	1.54	0.214	5.16	0.300	11.1	
$H = 30, V_\infty = 6000$								
1.0	5.64	1.40	4.76	1.25	8.12	2.13	4.88	
1.2	5.10	1.51	4.28	1.08	7.55	1.81	5.22	
1.5	4.52	1.65	3.77	0.897	7.00	1.47	5.63	
2.0	3.87	1.86	3.20	0.701	6.46	1.12	6.24	
2.5	3.43	2.05	2.81	0.576	6.11	0.899	6.82	
3.0	3.11	2.21	2.54	0.493	5.85	0.751	7.34	
3.5	2.87	2.36	2.33	0.435	5.64	0.648	7.80	
4.0	2.69	2.50	2.16	0.390	5.46	0.570	8.21	
4.5	2.52	2.63	2.02	0.354	5.30	0.506	8.59	
5	2.39	2.75	1.91	0.325	5.15	0.456	8.93	
6	2.22	2.98	1.75	0.290	4.95	0.395	9.41	
7	2.10	3.20	1.65	0.267	4.80	0.355	9.73	
8	2.01	3.40	1.56	0.249	4.67	0.324	10.1	
9	1.93	3.60	1.49	0.235	4.56	0.299	10.3	
10	1.87	3.79	1.44	0.225	4.47	0.282	10.6	
12	1.79	4.16	1.37	0.211	4.35	0.258	10.9	
14	1.72	4.51	1.31	0.201	4.24	0.240	11.1	
16	1.67	4.85	1.26	0.193	4.16	0.226	11.4	
18	1.64	5.18	1.23	0.187	4.09	0.216	11.5	
20	1.62	5.51	1.21	0.184	4.06	0.211	11.5	
25	1.64	6.32	1.23	0.188	4.10	0.217	11.5	
30	1.73	7.16	1.31	0.201	4.24	0.240	11.	
35	1.83	8.05	1.40	0.218	4.41	0.269	10.	
40	1.92	8.99	1.48	0.233	4.54	0.295	10.	

Table 13 Continued

 $\theta_b = 10^\circ$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\tau_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$\rho_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 5000$							
1.0	5.80	1.42	4.75	1.32	7.08	2.18	4.38
1.2	5.25	1.53	4.29	1.14	6.72	1.86	4.69
1.5	4.65	1.68	3.79	0.961	6.36	1.52	5.12
2.0	3.97	1.89	3.21	0.754	5.95	1.16	5.78
2.5	3.53	2.08	2.84	0.629	5.65	0.939	6.34
3.0	3.20	2.25	2.56	0.543	5.41	0.787	6.82
3.5	2.96	2.40	2.35	0.481	5.20	0.679	7.23
4.0	2.77	2.54	2.18	0.436	5.02	0.599	7.60
4.5	2.60	2.68	2.04	0.397	4.86	0.533	7.94
5	2.48	2.81	1.93	0.369	4.72	0.484	8.23
6	2.28	3.04	1.75	0.327	4.49	0.410	8.71
7	2.16	3.27	1.65	0.304	4.35	0.371	9.02
8	2.08	3.48	1.57	0.289	4.24	0.345	9.25
9	2.02	3.68	1.52	0.277	4.15	0.325	9.44
10	1.96	3.88	1.47	0.267	4.07	0.307	9.60
12	1.87	4.27	1.38	0.251	3.93	0.279	9.90
14	1.79	4.63	1.31	0.238	3.80	0.257	10.1
16	1.73	4.99	1.25	0.228	3.70	0.240	10.3
18	1.69	5.33	1.21	0.221	3.63	0.228	10.5
20	1.66	5.67	1.19	0.217	3.58	0.221	10.6
25	1.66	6.50	1.19	0.217	3.59	0.222	10.6
30	1.73	7.35	1.25	0.227	3.69	0.238	10.4
35	1.82	8.23	1.34	0.243	3.85	0.265	10.0
37	1.86	8.60	1.37	0.249	3.91	0.276	9.93
$H = 30, V_\infty = 4000$							
1.0	6.06	1.48	4.82	1.45	6.31	2.30	3.86
1.2	5.49	1.59	4.37	1.27	6.07	1.97	4.18
1.5	4.85	1.75	3.86	1.07	5.79	1.62	4.62
2.0	4.18	1.97	3.31	0.866	5.44	1.26	5.21
2.5	3.72	2.17	2.92	0.732	5.15	1.02	5.70
3.0	3.39	2.34	2.64	0.641	4.91	0.867	6.11
3.5	3.14	2.51	2.42	0.574	4.71	0.750	6.46
4.0	2.93	2.66	2.24	0.522	4.53	0.661	6.77
4.5	2.78	2.80	2.10	0.484	4.38	0.595	7.04
5	2.64	2.94	1.98	0.452	4.24	0.539	7.29
6	2.43	3.19	1.80	0.407	4.01	0.462	7.68
7	2.32	3.43	1.70	0.383	3.87	0.421	7.91
8	2.23	3.66	1.62	0.365	3.76	0.391	8.11
9	2.16	3.87	1.55	0.351	3.67	0.366	8.28
10	2.09	4.09	1.49	0.338	3.58	0.344	8.45
12	1.98	4.49	1.38	0.317	3.42	0.308	8.73
14	1.89	4.88	1.30	0.301	3.30	0.282	8.96
16	1.82	5.25	1.24	0.290	3.20	0.263	9.14
18	1.77	5.61	1.19	0.281	3.12	0.249	9.27
20	1.74	5.96	1.16	0.275	3.06	0.239	9.38
25	1.70	6.82	1.12	0.269	2.98	0.228	9.49
30	1.73	7.68	1.15	0.274	3.04	0.237	9.40
35	1.80	8.56	1.22	0.287	3.17	0.258	9.18
40	1.90	9.49	1.31	0.303	3.32	0.285	8.93

Table 13 Continued

 $\cdot \theta_b - 10^{\circ}$ 

$x_w$	$E \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$p_w \cdot 10$	$\beta_w$
$H = 30, V_{\infty} = 3000$							
1.0	6.23	1.53	4.77	1.61	5.52	2.36	3.45
1.2	5.67	1.65	4.34	1.43	5.32	2.05	3.74
1.5	5.05	1.81	3.86	1.23	5.06	1.71	4.11
2.0	4.30	2.07	3.25	1.00	4.68	1.30	4.66
2.5	3.86	2.27	2.89	0.873	4.41	1.07	5.04
3.0	3.54	2.46	2.62	0.784	4.18	0.924	5.36
3.5	3.30	2.63	2.41	0.719	3.99	0.814	5.62
4.0	3.10	2.79	2.23	0.667	3.82	0.724	5.85
4.5	2.94	2.94	2.09	0.626	3.67	0.655	6.06
5	2.80	3.08	1.97	0.593	3.54	0.598	6.24
6	2.59	3.35	1.78	0.544	3.34	0.516	6.55
7	2.44	3.60	1.64	0.510	3.17	0.460	6.77
8	2.35	3.84	1.55	0.490	3.06	0.426	6.92
9	2.27	4.07	1.48	0.475	2.96	0.400	7.04
10	2.21	4.30	1.42	0.462	2.87	0.378	7.14
12	2.11	4.73	1.31	0.442	2.72	0.344	7.32
14	2.03	5.14	1.23	0.426	2.61	0.319	7.46
16	1.97	5.54	1.17	0.414	2.52	0.299	7.58
18	1.92	5.93	1.12	0.405	2.45	0.284	7.67
20	1.88	6.31	1.08	0.398	2.39	0.272	7.75
25	1.82	7.24	1.02	0.387	2.30	0.256	7.86
30	1.82	8.15	1.02	0.387	2.30	0.256	7.86
35	1.90	9.08	1.10	0.401	2.42	0.278	7.71
40	2.00	10.0	1.20	0.420	2.56	0.309	7.52
$H = 10, V_{\infty} = 5000$							
1.0	5.86	1.44	4.78	1.34	6.98	2.21	4.26
1.2	5.30	1.55	4.32	1.16	6.67	1.89	4.60
1.5	4.69	1.70	3.83	0.971	6.39	1.55	5.08
2.0	4.00	1.92	3.25	0.762	5.99	1.18	5.74
2.5	3.56	2.11	2.87	0.637	5.70	0.957	6.30
3.0	3.24	2.28	2.59	0.549	5.46	0.802	6.78
3.5	2.98	2.43	2.37	0.484	5.25	0.689	7.21
4.0	2.79	2.57	2.21	0.439	5.07	0.609	7.57
4.5	2.63	2.71	2.07	0.401	4.92	0.545	7.90
5	2.50	2.84	1.95	0.371	4.78	0.492	8.20
6	2.30	3.08	1.77	0.331	4.56	0.418	8.67
7	2.19	3.30	1.67	0.306	4.42	0.380	8.99
8	2.11	3.52	1.60	0.291	4.31	0.353	9.22
9	2.04	3.73	1.54	0.278	4.22	0.330	9.43
10	1.97	3.93	1.48	0.266	4.13	0.311	9.61
12	1.87	4.31	1.39	0.248	3.97	0.280	9.94
14	1.79	4.68	1.31	0.235	3.85	0.257	10.2
16	1.73	5.03	1.26	0.225	3.75	0.240	10.4
18	1.68	5.37	1.22	0.217	3.67	0.227	10.6
20	1.66	5.71	1.19	0.213	3.62	0.219	10.7
25	1.65	6.53	1.18	0.212	3.61	0.217	10.7
30	1.70	7.37	1.23	0.220	3.70	0.232	10.5
35	1.80	8.25	1.32	0.236	3.85	0.258	10.2
40	1.89	9.17	1.40	0.251	4.00	0.285	9.89

Table 13 Continued

 $\theta_b = 10^\circ$ 

$x_w$	$\xi \cdot 10$	$y_w$	$n_w \cdot 10$	$i_w \cdot 10$	$p_w$	$p_w \cdot 10$	$\beta_w$
$H = 10, V_\infty = 3000$							
1.0	6.22	1.53	4.76	1.59	5.54	2.35	3.47
1.2	5.65	1.65	4.33	1.41	5.34	2.04	3.76
1.5	5.02	1.81	3.84	1.21	5.08	1.69	4.14
2.5	3.90	2.25	2.92	0.876	4.46	1.09	5.03
3.5	3.30	2.61	2.41	0.709	4.03	0.810	5.65
4.5	2.94	2.92	2.10	0.619	3.72	0.655	6.09
5.5	2.69	3.20	1.88	0.559	3.47	0.553	6.45
6.5	2.51	3.46	1.71	0.517	3.27	0.482	6.72
7.5	2.37	3.70	1.58	0.487	3.12	0.433	6.92
8.5	2.30	3.94	1.51	0.472	3.02	0.407	7.05
9.5	2.23	4.16	1.45	0.459	2.93	0.385	7.16
10.5	2.18	4.38	1.39	0.447	2.86	0.366	7.26
12.5	2.08	4.81	1.30	0.428	2.73	0.334	7.43
14.5	2.00	5.22	1.22	0.414	2.62	0.311	7.58
16.5	1.94	5.61	1.16	0.403	2.53	0.292	7.69
18.5	1.90	6.00	1.11	0.394	2.46	0.278	7.78
20.5	1.86	6.37	1.07	0.387	2.41	0.267	7.85
25.5	1.81	7.29	1.02	0.378	2.33	0.252	7.96
30.5	1.83	8.20	1.04	0.381	2.36	0.258	7.92
35.5	1.91	9.14	1.12	0.396	2.48	0.281	7.76
40.5	1.99	10.1	1.20	0.411	2.60	0.306	7.61
$H = 30, V_\infty = 7500, \bar{R} = 0$							
1.0	4.22	1.26	3.61	0.788	7.93	1.33	6.50
1.1	4.03	1.30	3.43	0.730	7.61	1.22	6.69
1.2	3.85	1.34	3.27	0.678	7.41	1.13	6.87
1.3	3.70	1.38	3.13	0.634	7.23	1.05	7.04
1.4	3.57	1.42	3.01	0.598	7.03	0.986	7.18
1.5	3.46	1.45	2.90	0.565	6.88	0.926	7.32
2.0	3.00	1.61	2.49	0.445	6.39	0.709	8.03
2.5	2.69	1.75	2.22	0.371	6.07	0.577	8.68
3.0	2.51	1.88	2.06	0.331	5.89	0.506	9.13
3.5	2.38	2.00	1.95	0.303	5.74	0.457	9.50
4.0	2.27	2.12	1.84	0.279	5.61	0.414	9.87
4.5	2.17	2.23	1.76	0.260	5.49	0.381	10.1
5.0	2.09	2.34	1.69	0.245	5.39	0.354	10.4
5.5	2.05	2.44	1.65	0.237	5.34	0.341	10.6
6.0	2.01	2.54	1.62	0.230	5.29	0.329	10.7
6.5	1.96	2.64	1.57	0.221	5.22	0.313	10.9
7.0	1.91	2.74	1.53	0.212	5.15	0.297	11.1
7.5	1.87	2.84	1.49	0.204	5.08	0.283	11.3
8.0	1.82	2.93	1.45	0.197	5.01	0.270	11.5
8.5	1.78	3.02	1.41	0.190	4.95	0.259	11.7
9.0	1.75	3.11	1.38	0.184	4.89	0.249	11.9
9.5	1.71	3.19	1.35	0.179	4.84	0.240	12.0
10	1.69	3.28	1.33	0.175	4.80	0.232	12.1
11	1.65	3.45	1.29	0.169	4.74	0.222	12.3
12	1.63	3.61	1.27	0.166	4.69	0.216	12.5
13	1.61	3.77	1.26	0.163	4.66	0.211	12.5

Table 13 Continued

 $\theta_b \cdot 10^6$ 

$r_w$	$E \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$P_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 7500, \bar{R} = 0$							
14	1.59	3.93	1.24	0.160	4.63	0.207	12.6
15	1.58	4.09	1.23	0.159	4.61	0.204	12.7
16	1.57	4.25	1.22	0.157	4.60	0.202	12.7
17	1.57	4.41	1.22	0.157	4.59	0.200	12.8
18	1.57	4.57	1.22	0.157	4.59	0.201	12.8
19	1.58	4.72	1.23	0.158	4.61	0.203	12.7
20	1.59	4.88	1.24	0.160	4.62	0.206	12.7
21	1.60	5.04	1.25	0.162	4.65	0.209	12.6
22	1.62	5.20	1.27	0.165	4.69	0.215	12.5
23	1.65	5.37	1.29	0.169	4.73	0.222	12.3
24	1.68	5.53	1.32	0.174	4.79	0.230	12.2
25	1.71	5.70	1.35	0.179	4.84	0.239	12.0
26	1.75	5.88	1.38	0.184	4.89	0.248	11.9
27	1.78	6.06	1.41	0.189	4.94	0.257	11.7
28	1.80	6.23	1.43	0.194	4.98	0.265	11.6
29	1.83	6.42	1.46	0.198	5.03	0.273	11.5
30	1.86	6.60	1.48	0.202	5.06	0.280	11.4
31	1.88	6.79	1.50	0.206	5.10	0.287	11.3
32	1.90	6.98	1.52	0.210	5.13	0.293	11.2
33	1.92	7.17	1.53	0.213	5.15	0.298	11.1
34	1.93	7.36	1.55	0.215	5.17	0.303	11.0
35	1.94	7.56	1.56	0.218	5.19	0.307	11.0
36	1.95	7.75	1.57	0.220	5.20	0.310	11.0
37	1.96	7.95	1.57	0.221	5.22	0.313	10.9
38	1.97	8.14	1.58	0.222	5.22	0.314	10.9
39	1.97	8.34	1.58	0.223	5.23	0.316	10.9
40	1.97	8.54	1.58	0.223	5.23	0.317	10.9
$H = 30, V_\infty = 7500, \bar{R} = 0.2$							
1.0	4.50	1.29	3.87	0.872	8.38	1.49	6.24
1.1	4.30	1.34	3.69	0.814	8.07	1.38	6.43
1.2	4.11	1.38	3.51	0.755	7.75	1.27	6.61
1.3	3.94	1.42	3.25	0.704	7.49	1.18	6.78
1.4	3.81	1.46	3.22	0.666	7.32	1.11	6.93
1.5	3.68	1.50	3.10	0.627	7.15	1.04	7.07
2.0	3.17	1.67	2.65	0.489	6.58	0.788	7.73
2.5	2.84	1.82	2.35	0.406	6.23	0.639	8.35
3.0	2.60	1.95	2.14	0.350	5.98	0.540	8.92
3.5	2.43	2.08	1.99	0.313	5.80	0.475	9.37
4.0	2.31	2.20	1.89	0.289	5.66	0.432	9.72
4.5	2.22	2.31	1.80	0.270	5.55	0.398	10.0
5.0	2.15	2.42	1.74	0.256	5.46	0.373	10.2
5.5	2.09	2.53	1.69	0.245	5.39	0.355	10.4
6.0	2.05	2.63	1.65	0.236	5.33	0.339	10.6
6.5	1.99	2.73	1.60	0.227	5.26	0.323	10.8
7.0	1.95	2.83	1.56	0.218	5.19	0.308	11.0
7.5	1.90	2.93	1.52	0.210	5.13	0.294	11.2
8.0	1.86	3.02	1.48	0.203	5.07	0.281	11.4
8.5	1.82	3.11	1.45	0.196	5.01	0.270	11.5
9.0	1.78	3.20	1.41	0.190	4.95	0.259	11.7

Table 13 Continued

 $\theta_b = 10^\circ$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$p_w$	$p_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 7500, \bar{R} = 0.2$							
9.5	1.75	3.29	1.38	0.185	4.90	0.250	11.8
10	1.72	3.38	1.36	0.180	4.85	0.241	12.0
11	1.67	3.55	1.32	0.173	4.78	0.229	12.2
12	1.64	3.71	1.29	0.168	4.72	0.220	12.4
13	1.62	3.88	1.27	0.165	4.68	0.214	12.5
14	1.60	4.04	1.25	0.162	4.65	0.209	12.6
15	1.59	4.20	1.24	0.159	4.62	0.205	12.7
16	1.58	4.36	1.23	0.158	4.61	0.203	12.7
17	1.57	4.52	1.22	0.158	4.60	0.202	12.7
18	1.57	4.67	1.22	0.157	4.59	0.201	12.8
19	1.58	4.83	1.23	0.158	4.60	0.203	12.7
20	1.58	4.99	1.23	0.159	4.61	0.204	12.7
21	1.59	5.15	1.24	0.160	4.63	0.206	12.7
22	1.60	5.31	1.25	0.162	4.65	0.210	12.6
23	1.62	5.47	1.27	0.165	4.69	0.215	12.5
24	1.65	5.63	1.29	0.169	4.73	0.222	12.3
25	1.68	5.80	1.32	0.173	4.78	0.229	12.2
26	1.71	5.97	1.35	0.178	4.83	0.238	12.0
27	1.74	6.14	1.37	0.183	4.88	0.246	11.9
28	1.77	6.32	1.40	0.188	4.93	0.255	11.8
29	1.80	6.50	1.43	0.193	4.97	0.263	11.6
30	1.82	6.68	1.45	0.197	5.01	0.271	11.5
31	1.85	6.86	1.47	0.201	5.05	0.278	11.4
32	1.87	7.05	1.49	0.205	5.09	0.285	11.3
33	1.89	7.24	1.51	0.208	5.11	0.291	11.2
34	1.91	7.43	1.52	0.211	5.14	0.296	11.1
35	1.92	7.62	1.54	0.214	5.16	0.300	11.1
$H = 30, V_\infty = 7500, \bar{R} = 0.5$							
1.0	4.88	1.33	4.21	0.992	8.88	1.72	5.90
1.1	4.63	1.38	3.99	0.916	8.56	1.57	6.12
1.2	4.41	1.42	3.78	0.845	8.25	1.44	6.32
1.3	4.24	1.47	3.63	0.795	7.97	1.35	6.49
1.4	4.08	1.51	3.47	0.744	7.70	1.25	6.65
1.5	3.93	1.55	3.34	0.701	7.48	1.17	6.79
2.0	3.40	1.73	2.85	0.550	6.83	0.899	7.42
2.5	3.03	1.89	2.52	0.454	6.43	0.725	7.99
3.0	2.76	2.03	2.28	0.387	6.14	0.606	8.54
3.5	2.55	2.17	2.10	0.340	5.93	0.522	9.04
4.0	2.39	2.29	1.96	0.306	5.75	0.461	9.48
4.5	2.28	2.41	1.86	0.282	5.62	0.419	9.82
5.0	2.21	2.52	1.79	0.268	5.54	0.395	10.0
5.5	2.15	2.63	1.74	0.256	5.47	0.374	10.2
6.0	2.09	2.73	1.69	0.245	5.39	0.355	10.4
6.5	2.04	2.84	1.64	0.235	5.32	0.338	10.6
7.0	1.99	2.94	1.60	0.226	5.26	0.322	10.8
7.5	1.94	3.04	1.56	0.218	5.19	0.307	11.0
8.0	1.90	3.13	1.52	0.210	5.13	0.294	11.2
8.5	1.86	3.23	1.48	0.203	5.07	0.282	11.3
9.0	1.82	3.32	1.45	0.197	5.01	0.271	11.5

Table 13 Continued

$\theta_b$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$p_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 7500, \bar{R} = 0.5$							
1.5	1.79	3.41	1.42	0.191	4.96	0.261	11.7
1.1	1.76	3.50	1.39	0.186	4.91	0.252	11.8
1.4	1.71	3.67	1.34	0.178	4.83	0.237	12.1
1.2	1.67	3.84	1.31	0.172	4.77	0.227	12.2
1.0	1.65	4.01	1.29	0.168	4.73	0.221	12.4
1.4	1.63	4.17	1.27	0.165	4.69	0.215	12.5
1.1	1.61	4.34	1.25	0.163	4.66	0.211	12.6
1.6	1.59	4.50	1.24	0.160	4.63	0.207	12.6
1.7	1.58	4.66	1.23	0.159	4.62	0.205	12.7
1.3	1.58	4.81	1.23	0.159	4.61	0.204	12.7
1.2	1.58	4.97	1.23	0.159	4.62	0.205	12.7
1.0	1.59	5.13	1.24	0.160	4.62	0.205	12.7
1.1	1.59	5.29	1.24	0.160	4.63	0.206	12.6
1.2	1.60	5.45	1.25	0.161	4.64	0.208	12.6
1.3	1.61	5.61	1.26	0.163	4.67	0.212	12.5
1.4	1.63	5.77	1.27	0.166	4.70	0.216	12.4
1.5	1.65	5.94	1.29	0.169	4.74	0.222	12.3
1.6	1.68	6.11	1.32	0.173	4.78	0.229	12.2
27	1.70	6.28	1.34	0.177	4.82	0.237	12.1
28	1.73	6.45	1.37	0.182	4.87	0.244	11.9
29	1.76	6.62	1.39	0.186	4.91	0.252	11.8
30	1.78	6.80	1.41	0.191	4.95	0.259	11.7
31	1.81	6.98	1.44	0.195	4.99	0.267	11.6
32	1.83	7.16	1.46	0.199	5.03	0.274	11.5
33	1.86	7.35	1.48	0.202	5.06	0.280	11.4
34	1.87	7.54	1.50	0.206	5.09	0.286	11.3
35	1.89	7.72	1.51	0.209	5.12	0.291	11.2
36	1.91	7.91	1.53	0.211	5.14	0.296	11.1
$H = 30, V_\infty = 5000, \bar{R} = 0$							
1.0	4.57	1.32	3.72	0.937	6.32	1.48	5.19
1.1	4.34	1.36	3.53	0.866	6.18	1.35	5.39
1.2	4.16	1.40	3.38	0.811	6.07	1.26	5.58
1.3	3.98	1.44	3.23	0.758	5.96	1.16	5.76
1.4	3.84	1.43	3.11	0.718	5.87	1.09	5.93
1.5	3.70	1.52	2.99	0.678	5.78	1.02	6.10
2.0	3.22	1.69	2.57	0.546	5.42	0.792	6.79
2.5	2.89	1.85	2.29	0.465	5.14	0.651	7.35
3.0	2.65	1.98	2.08	0.408	4.91	0.551	7.83
3.5	2.46	2.11	1.93	0.365	4.70	0.477	8.23
4.0	2.36	2.23	1.82	0.344	4.59	0.439	8.51
4.5	2.28	2.35	1.75	0.327	4.49	0.411	8.71
5.0	2.20	2.46	1.68	0.312	4.39	0.384	8.92
5.5	2.13	2.57	1.62	0.299	4.31	0.362	9.10
6.0	2.09	2.67	1.58	0.290	4.25	0.346	9.24
6.5	2.05	2.78	1.55	0.284	4.20	0.336	9.33
7.0	2.03	2.88	1.52	0.279	4.16	0.327	9.41
7.5	2.00	2.98	1.50	0.273	4.12	0.318	9.50
8.0	1.96	3.08	1.47	0.267	4.07	0.307	9.60
8.5	1.93	3.18	1.44	0.261	4.02	0.297	9.71

Table 13 Concluded

 $\theta_b = 10^\circ$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$p_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 5000, \bar{R} = 0$							
9.0	1.90	3.27	1.41	0.256	3.97	0.288	9.81
9.5	1.87	3.37	1.38	0.251	3.92	0.279	9.90
10	1.84	3.46	1.35	0.246	3.88	0.270	10.0
11	1.79	3.64	1.30	0.236	3.79	0.255	10.1
12	1.74	3.82	1.26	0.229	3.71	0.242	10.3
13	1.70	3.99	1.22	0.223	3.65	0.231	10.5
14	1.67	4.16	1.20	0.218	3.60	0.224	10.6
15	1.65	4.33	1.18	0.215	3.57	0.219	10.6
16	1.64	4.49	1.17	0.214	3.55	0.216	10.7
17	1.64	4.66	1.16	0.213	3.54	0.214	10.7
18	1.63	4.82	1.16	0.212	3.53	0.213	10.7
19	1.64	4.99	1.16	0.212	3.53	0.214	10.7
20	1.64	5.15	1.16	0.213	3.54	0.214	10.7
21	1.64	5.31	1.17	0.214	3.55	0.216	10.7
22	1.66	5.48	1.18	0.216	3.57	0.219	10.6
23	1.67	5.65	1.20	0.218	3.60	0.224	10.6
24	1.69	5.81	1.21	0.221	3.63	0.228	10.5
25	1.71	5.99	1.23	0.224	3.67	0.234	10.4
26	1.74	6.16	1.26	0.228	3.71	0.241	10.3
27	1.76	6.33	1.28	0.233	3.75	0.248	10.2
28	1.79	6.51	1.31	0.237	3.80	0.256	10.1
29	1.82	6.69	1.33	0.242	3.84	0.264	10.0
30	1.84	6.88	1.36	0.246	3.88	0.271	9.99
31	1.87	7.06	1.38	0.250	3.92	0.279	9.91
32	1.89	7.25	1.40	0.254	3.96	0.285	9.83
33	1.91	7.44	1.42	0.258	3.99	0.291	9.77
34	1.93	7.63	1.43	0.261	4.02	0.297	9.71
35	1.95	7.83	1.45	0.264	4.04	0.302	9.66
36	1.96	8.02	1.46	0.266	4.06	0.306	9.62
37	1.97	8.22	1.47	0.269	4.08	0.310	9.58
38	1.98	8.42	1.48	0.271	4.10	0.313	9.55
39	1.99	8.62	1.49	0.272	4.11	0.316	9.52
40	2.00	8.82	1.50	0.274	4.12	0.319	9.49

Table 14

 $\theta_T = 15^\circ, \gamma = 1.4$ 

$x_w$	$\xi \cdot 10$	$y_w$	$R_w$	$\xi \cdot 10$	$y_w$	$R_w$	$x_w$	$\xi \cdot 10$	$y_w$	$R_w$	
$M_\infty = \infty$				$M_\infty = 15$				$M_\infty = 6$			
1.0	5.94	1.54	6	6.04	1.56	5.53	1.0	6.54	1.64	4.09	
1.2	5.37	1.65	6	5.48	1.68	5.47	1.2	6.01	1.76	3.93	
1.5	4.73	1.80	6	4.87	1.83	5.37	1.5	5.43	1.93	3.72	
1.75	4.34	1.91	6	4.48	1.95	5.29	1.75	5.06	2.06	3.56	
2.00	4.03	2.02	6	4.17	2.06	5.21	2.00	4.76	2.18	3.42	
2.25	3.78	2.11	6	3.92	2.16	5.14	2.25	4.52	2.30	3.30	
2.50	3.56	2.21	6	3.71	2.25	5.06	2.50	4.32	2.41	3.18	
2.75	3.37	2.29	6	3.52	2.34	4.99	2.75	4.15	2.52	3.08	
3.00	3.21	2.38	6	3.37	2.43	4.92	3.00	4.01	2.62	2.99	
3.25	3.06	2.45	6	3.23	2.51	4.85	3.25	3.87	2.72	2.90	
3.50	2.94	2.53	6	3.11	2.59	4.79	3.50	3.77	2.81	2.83	
3.75	2.83	2.60	6	3.01	2.67	4.73	3.75	3.67	2.91	2.76	
4.0	2.75	2.67	6	2.91	2.74	4.67	4.0	3.57	3.00	2.69	
4.5	2.68	2.81	6	2.79	2.88	4.59	4.5	3.42	3.17	2.58	
5	2.62	2.94	6	2.73	3.02	4.55	5	3.29	3.34	2.48	
6	2.52	3.20	6	2.64	3.29	4.47	6	3.14	3.66	2.36	
7	2.43	3.45	6	2.56	3.55	4.40	7	3.09	3.97	2.32	
8	2.37	3.69	6	2.50	3.80	4.35	8	3.04	4.28	2.27	
9	2.34	3.92	6	2.46	4.05	4.32	9	3.00	4.58	2.24	
10	2.34	4.16	6	2.45	4.30	4.31	10	2.98	4.88	2.22	
12	2.44	4.63	6	2.51	4.79	4.36	12	2.99	5.48	2.22	
14	2.56	5.13	6	2.63	5.31	4.47	14	3.06	6.08	2.29	
16	2.71	5.66	6	2.76	5.85	4.57	16	3.16	6.70	2.37	
19				2.92	6.70	4.68	18	3.24	7.34	2.44	
							20	3.30	8.00	2.48	
$M_\infty = 23$				$M_\infty = 10$				$M_\infty = 4$			
1.0	5.99	1.55	5.79	6.18	1.58	5.07	1.0	7.21	1.76	3.13	
1.2	5.43	1.66	5.76	5.62	1.69	4.96	1.2	6.70	1.90	2.98	
1.5	4.80	1.82	5.71	5.01	1.85	4.80	1.5	6.15	2.09	2.80	
1.75	4.41	1.93	5.67	4.63	1.97	4.67	1.75	5.79	2.24	2.67	
2.00	4.10	2.04	5.63	4.33	2.09	4.55	2.00	5.52	2.38	2.56	
2.25	3.85	2.14	5.58	4.07	2.19	4.44	2.25	5.29	2.51	2.47	
2.50	3.63	2.23	5.54	3.87	2.29	4.33	2.50	5.09	2.64	2.38	
2.75	3.44	2.32	5.50	3.69	2.38	4.23	2.75	4.93	2.77	2.31	
3.00	3.29	2.40	5.46	3.53	2.48	4.13	3.00	4.79	2.89	2.24	
3.25	3.14	2.48	5.42	3.41	2.56	4.05	3.25	4.66	3.01	2.18	
3.50	3.02	2.56	5.39	3.28	2.65	3.96	3.50	4.56	3.12	2.13	
3.75	2.92	2.64	5.35	3.18	2.73	3.88	3.75	4.46	3.24	2.08	
4.0	2.83	2.71	5.32	3.08	2.80	3.80	4.0	4.37	3.35	2.03	
4.5	2.73	2.85	5.28	2.94	2.95	3.68	4.5	4.23	3.56	1.96	
5	2.67	2.98	5.25	2.86	3.10	3.61	5	4.10	3.77	1.89	
6	2.57	3.24	5.20	2.77	3.38	3.53	6	3.91	4.17	1.79	
7	2.49	3.50	5.16	2.70	3.66	3.45	7	3.76	4.55	1.70	
8	2.43	3.74	5.13	2.64	3.92	3.39	8	3.67	4.93	1.65	
9	2.39	3.98	5.11	2.60	4.19	3.35	9	3.64	5.29	1.63	
10	2.38	4.22	5.10	2.59	4.44	3.34	10	3.63	5.65	1.62	
12	2.46	4.71	5.14	2.62	4.97	3.38	12	3.60	6.38	1.61	
14	2.58	5.21	5.21	2.74	5.50	3.50	15	3.66	7.47	1.64	
16	2.72	5.74	5.27	2.86	6.06	3.61					
18	2.85	6.30	5.33	2.96	6.65	3.70					
20	2.94	6.88	5.36	3.03	7.25	3.76					

Table 15

 $\theta_b = 15^\circ$ 

$x_w$	$\xi \cdot 10$	$\gamma_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$p_w \cdot 10$	$\beta_w$
$H = 60, V_\infty = 10\ 000$							
1.0	5.21	1.33	4.64	1.08	11.4	1.95	6.24
1.2	4.66	1.43	4.15	0.911	11.0	1.63	6.72
1.5	4.04	1.56	3.62	0.722	11.1	1.28	7.81
1.75	3.69	1.65	3.30	0.621	10.6	1.09	8.52
2.00	3.42	1.74	3.04	0.545	9.99	0.953	9.01
2.25	3.20	1.83	2.83	0.487	9.42	0.841	9.39
2.50	3.03	1.90	2.66	0.441	8.90	0.754	9.70
2.75	2.89	1.98	2.52	0.405	8.47	0.687	9.94
3.00	2.78	2.05	2.41	0.378	8.11	0.636	10.1
3.25	2.70	2.12	2.34	0.362	7.89	0.604	10.2
3.50	2.65	2.19	2.29	0.349	7.74	0.581	10.3
3.75	2.61	2.25	2.24	0.338	7.60	0.561	10.4
4.0	2.57	2.32	2.20	0.329	7.49	0.544	10.5
4.5	2.50	2.44	2.14	0.315	7.29	0.516	10.6
5	2.45	2.57	2.09	0.303	7.14	0.495	10.7
6	2.38	2.81	2.02	0.288	6.96	0.468	10.8
7	2.33	3.04	1.98	0.279	6.84	0.449	10.9
8	2.39	3.28	2.04	0.292	7.00	0.474	10.8
9	2.50	3.53	2.14	0.315	7.30	0.517	10.6
10	2.60	3.78	2.24	0.337	7.58	0.558	10.4
12	2.78	4.32	2.42	0.380	8.14	0.640	10.1
14	2.88	4.89	2.51	0.403	8.44	0.682	9.96
16	2.88	5.47	2.52	0.404	8.46	0.685	9.95
18	2.86	6.04	2.49	0.399	8.39	0.675	9.98
20	2.83	6.61	2.47	0.392	8.30	0.662	10.0
$H = 60, V_\infty = 7500$							
1.0	5.31	1.25	4.69	1.13	10.6	2.00	5.89
1.2	4.77	1.45	4.19	0.966	9.84	1.68	6.39
1.5	4.21	1.58	3.66	0.791	8.81	1.35	6.91
2.05	3.56	1.79	3.03	0.601	7.48	0.992	7.54
2.30	3.36	1.88	2.84	0.544	7.08	0.886	7.76
2.55	3.19	1.96	2.68	0.499	6.76	0.802	7.94
2.80	3.05	2.04	2.54	0.462	6.52	0.734	8.11
3.05	2.94	2.11	2.44	0.434	6.35	0.686	8.26
3.30	2.87	2.19	2.38	0.417	6.25	0.653	8.36
3.55	2.81	2.26	2.32	0.403	6.18	0.628	8.46
3.80	2.76	2.33	2.28	0.391	6.12	0.606	8.56
4.05	2.71	2.40	2.24	0.380	6.06	0.586	8.65
4.55	2.63	2.53	2.16	0.361	5.97	0.553	8.82
5.05	2.56	2.66	2.10	0.345	5.88	0.524	8.99
6.05	2.44	2.91	1.99	0.319	5.74	0.477	9.30
7.05	2.41	3.15	1.97	0.313	5.71	0.467	9.38
8.05	2.46	3.39	2.01	0.323	5.76	0.485	9.25
9.05	2.54	3.64	2.08	0.341	5.86	0.516	9.04
10	2.60	3.90	2.14	0.355	5.93	0.541	8.89
12	2.76	4.44	2.28	0.391	6.12	0.606	8.56
14	2.89	5.00	2.39	0.422	6.28	0.662	8.33
16	2.93	5.59	2.44	0.434	6.35	0.683	8.26
18	2.95	6.18	2.45	0.436	6.37	0.688	8.25
20	2.93	6.77	2.44	0.434	6.35	0.683	8.26

Table 15 Continued

 $\theta_b = 15^\circ$ 

$r_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$p_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 7500$							
1.0	5.46	1.38	4.74	1.18	9.53	2.07	5.38
1.2	4.92	1.48	4.25	1.00	8.94	1.74	5.86
1.5	4.36	1.62	3.73	0.829	8.15	1.41	6.38
1.75	4.01	1.73	3.41	0.724	7.62	1.21	6.71
2.00	3.73	1.82	3.16	0.644	7.25	1.07	7.00
2.25	3.50	1.91	2.95	0.579	6.95	0.951	7.27
2.50	3.31	2.00	2.77	0.526	6.72	0.855	7.53
2.75	3.14	2.08	2.62	0.482	6.54	0.775	7.78
3.00	3.00	2.16	2.50	0.447	6.40	0.713	8.02
3.25	2.92	2.23	2.42	0.425	6.31	0.674	8.18
3.50	2.86	2.30	2.37	0.411	6.25	0.649	8.30
3.75	2.81	2.37	2.32	0.398	6.19	0.625	8.42
4.0	2.76	2.44	2.28	0.386	6.14	0.605	8.53
4.5	2.67	2.58	2.20	0.366	6.05	0.568	8.73
5	2.59	2.71	2.13	0.348	5.97	0.537	8.93
6	2.46	2.96	2.02	0.320	5.83	0.488	9.27
7	2.41	3.21	1.97	0.308	5.77	0.466	9.44
8	2.42	3.45	1.98	0.311	5.78	0.470	9.40
9	2.46	3.69	2.02	0.320	5.83	0.487	9.27
10	2.52	3.94	2.07	0.334	5.90	0.511	9.10
12	2.66	4.46	2.19	0.363	6.04	0.563	8.76
14	2.81	5.01	2.33	0.400	6.20	0.628	8.40
16	2.90	5.58	2.41	0.422	6.29	0.667	8.21
18	2.94	6.17	2.44	0.431	6.33	0.684	8.14
20	2.95	6.76	2.45	0.432	6.34	0.686	8.13
$H = 30, V_\infty = 6000$							
1.0	5.63	1.40	4.75	1.25	8.13	2.13	4.88
1.2	5.11	1.51	4.28	1.08	7.55	1.81	5.22
1.5	4.52	1.65	3.76	0.896	7.00	1.47	5.63
1.75	4.16	1.76	3.45	0.786	6.68	1.27	5.94
2.00	3.86	1.86	3.19	0.699	6.45	1.11	6.24
2.25	3.62	1.96	2.98	0.630	6.26	0.994	6.54
2.50	3.42	2.04	2.81	0.576	6.11	0.899	6.82
2.75	3.26	2.13	2.66	0.532	5.97	0.820	7.09
3.00	3.11	2.21	2.54	0.493	5.85	0.751	7.34
3.25	2.99	2.28	2.43	0.463	5.75	0.698	7.55
3.50	2.91	2.36	2.36	0.444	5.68	0.664	7.71
3.75	2.85	2.43	2.31	0.429	5.62	0.637	7.84
4.0	2.79	2.50	2.26	0.415	5.57	0.614	7.96
4.5	2.70	2.64	2.17	0.392	5.48	0.574	8.17
5	2.62	2.77	2.10	0.374	5.40	0.541	8.36
6	2.52	3.03	2.02	0.352	5.29	0.503	8.60
7	2.48	3.28	1.98	0.344	5.25	0.489	8.69
8	2.47	3.53	1.97	0.341	5.24	0.483	8.73
9	2.47	3.77	1.98	0.342	5.24	0.485	8.72
10	2.51	4.02	2.01	0.351	5.29	0.501	8.61
12	2.64	4.54	2.12	0.378	5.42	0.549	8.31
14	2.78	5.08	2.24	0.411	5.55	0.607	7.99
17	2.92	5.94	2.37	0.446	5.69	0.668	7.69

Table 15 Continued

 $\theta_b = 15^\circ$ 

$x_w$	$\xi \cdot 10$	$y_w$	$n_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$R_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 5000$							
1.0	5.81	1.42	4.76	1.33	7.08	2.19	4.38
1.2	5.25	1.53	4.29	1.15	6.72	1.87	4.69
1.5	4.65	1.68	3.78	0.958	6.35	1.51	5.12
1.75	4.27	1.79	3.47	0.844	6.13	1.32	5.46
2.00	3.97	1.89	3.22	0.755	5.95	1.16	5.78
2.25	3.72	1.99	3.00	0.683	5.79	1.03	6.08
2.50	3.51	2.08	2.83	0.626	5.54	0.933	6.35
2.75	3.34	2.17	2.68	0.579	5.51	0.892	6.60
3.00	3.19	2.25	2.55	0.539	5.40	0.781	6.84
3.25	3.07	2.33	2.45	0.509	5.30	0.727	7.04
3.50	2.97	2.40	2.36	0.483	5.21	0.682	7.22
3.75	2.90	2.48	2.29	0.463	5.13	0.646	7.37
4.0	2.84	2.55	2.24	0.451	5.09	0.626	7.46
4.5	2.76	2.69	2.18	0.433	5.02	0.594	7.61
5	2.70	2.82	2.13	0.420	4.96	0.572	7.72
6	2.62	3.09	2.05	0.400	4.87	0.538	7.90
7	2.56	3.35	2.00	0.386	4.81	0.514	8.04
8	2.51	3.60	1.96	0.377	4.76	0.495	8.14
9	2.50	3.85	1.94	0.373	4.75	0.491	8.18
10	2.52	4.10	1.96	0.378	4.77	0.499	8.12
12	2.63	4.62	2.06	0.403	4.89	0.542	7.88
14	2.75	5.16	2.16	0.430	5.00	0.589	7.63
16	2.86	5.72	2.26	0.457	5.11	0.636	7.41
18	2.94	6.30	2.33	0.476	5.19	0.671	7.26
20	2.98	6.90	2.37	0.486	5.22	0.688	7.19
$H = 30, V_\infty = 4000$							
1.0	6.05	1.48	4.81	1.45	6.30	2.29	3.86
1.2	5.48	1.59	4.36	1.27	6.07	1.97	4.19
1.5	4.86	1.75	3.86	1.07	5.79	1.62	4.62
1.75	4.48	1.86	3.55	0.954	5.60	1.41	4.93
2.00	4.17	1.97	3.30	0.862	5.43	1.25	5.22
2.25	3.92	2.07	3.09	0.789	5.28	1.12	5.47
2.50	3.71	2.17	2.91	0.727	5.14	1.01	5.71
2.75	3.54	2.26	2.76	0.679	5.02	0.934	5.92
3.00	3.38	2.34	2.63	0.637	4.90	0.860	6.12
3.25	3.24	2.43	2.51	0.600	4.80	0.795	6.31
3.50	3.14	2.51	2.42	0.574	4.71	0.745	6.46
3.75	3.05	2.58	2.35	0.551	4.64	0.711	6.57
4.0	3.00	2.66	2.30	0.539	4.60	0.690	6.66
4.5	2.92	2.81	2.23	0.519	4.52	0.655	6.79
5	2.85	2.95	2.17	0.502	4.45	0.625	6.91
6	2.73	3.23	2.07	0.474	4.34	0.577	7.11
7	2.64	3.50	1.98	0.452	4.24	0.540	7.28
8	2.57	3.76	1.93	0.438	4.17	0.515	7.40
9	2.54	4.02	1.89	0.430	4.13	0.501	7.47
10	2.53	4.27	1.88	0.427	4.12	0.497	7.49
12	2.59	4.78	1.94	0.441	4.19	0.520	7.38
14	2.69	5.31	2.02	0.463	4.29	0.559	7.20
16	2.80	5.86	2.12	0.490	4.40	0.604	7.00
18	2.90	6.43	2.21	0.514	4.50	0.645	6.82
20	2.97	7.02	2.28	0.532	4.57	0.677	6.71

Table 15 Continued

 $\theta_b = 15^\circ$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$p_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 3000$							
1.0	6.24	1.53	4.77	1.61	5.52	2.37	3.45
1.2	5.67	1.65	4.34	1.43	5.32	2.05	3.74
1.5	5.05	1.81	3.86	1.23	5.06	1.70	4.11
1.8	4.60	1.96	3.50	1.09	4.84	1.46	4.43
2.05	4.30	2.07	3.25	1.00	4.68	1.30	4.65
2.30	4.06	2.17	3.05	0.931	4.53	1.17	4.86
2.55	3.86	2.27	2.89	0.873	4.41	1.07	5.04
2.80	3.68	2.37	2.73	0.820	4.28	0.988	5.22
3.05	3.53	2.45	2.61	0.777	4.18	0.920	5.37
3.30	3.39	2.54	2.49	0.743	4.07	0.854	5.51
3.55	3.29	2.63	2.39	0.714	3.98	0.805	5.63
3.80	3.19	2.71	2.31	0.689	3.90	0.761	5.74
4.05	3.12	2.79	2.25	0.671	3.84	0.731	5.83
4.55	3.02	2.94	2.16	0.645	3.75	0.687	5.96
5.05	2.94	3.09	2.09	0.627	3.68	0.656	6.05
6.05	2.83	3.38	1.99	0.598	3.57	0.607	6.21
7.05	2.74	3.66	1.91	0.577	3.48	0.571	6.33
8.05	2.67	3.93	1.85	0.561	3.41	0.545	6.43
9.05	2.63	4.19	1.81	0.552	3.38	0.529	6.49
10	2.61	4.45	1.80	0.548	3.36	0.522	6.52
12	2.64	4.98	1.83	0.556	3.39	0.535	6.47
14	2.75	5.52	1.92	0.580	3.49	0.576	6.32
16	2.85	6.08	2.01	0.605	3.59	0.618	6.17
18	2.95	6.66	2.10	0.628	3.68	0.658	6.04
20	3.02	7.26	2.16	0.646	3.75	0.689	5.95
$H = 10, V_\infty = 5000$							
1.0	5.86	1.44	4.78	1.34	6.96	2.21	4.26
1.2	5.29	1.55	4.32	1.16	6.69	1.88	4.61
1.5	4.68	1.70	3.82	0.968	6.38	1.54	5.08
1.75	4.31	1.81	3.50	0.853	6.17	1.34	5.43
2.00	4.01	1.92	3.25	0.763	5.99	1.18	5.74
2.25	3.76	2.01	3.04	0.691	5.84	1.05	6.04
2.50	3.55	2.11	2.87	0.634	5.70	0.952	6.31
2.75	3.38	2.19	2.72	0.588	5.57	0.871	6.56
3.00	3.23	2.28	2.59	0.547	5.46	0.800	6.79
3.25	3.11	2.35	2.48	0.515	5.35	0.743	6.99
3.50	3.00	2.43	2.39	0.488	5.26	0.696	7.18
3.75	2.92	2.51	2.32	0.468	5.19	0.661	7.33
4.0	2.86	2.58	2.27	0.454	5.14	0.636	7.43
4.5	2.79	2.72	2.21	0.437	5.08	0.607	7.57
5	2.73	2.86	2.15	0.423	5.02	0.582	7.69
6	2.63	3.12	2.06	0.399	4.91	0.540	7.91
7	2.55	3.38	1.99	0.382	4.83	0.511	8.08
8	2.50	3.64	1.95	0.371	4.78	0.492	8.20
9	2.48	3.89	1.93	0.367	4.76	0.484	8.24
10	2.49	4.13	1.94	0.369	4.77	0.489	8.22
12	2.59	4.64	2.03	0.392	4.88	0.528	7.98
14	2.71	5.17	2.13	0.418	4.99	0.573	7.74
16	2.83	5.73	2.24	0.446	5.11	0.622	7.50
18	2.92	6.30	2.32	0.468	5.19	0.661	7.32
20	2.97	6.89	2.36	0.481	5.24	0.683	7.23

Table 15 Continued

 $\theta_b = 15^\circ$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$p_w$	$p_w \cdot 10$	$\beta_w$
$H = 10, V_\infty = 3000$							
1.0	6.21	1.53	4.75	1.59	5.53	2.35	3.47
1.2	5.65	1.65	4.33	1.41	5.34	2.03	3.77
1.5	5.03	1.81	3.85	1.22	5.08	1.69	4.14
2.0	4.34	2.04	3.29	1.00	4.74	1.32	4.64
2.25	4.09	2.15	3.09	0.932	4.59	1.19	4.85
2.50	3.88	2.25	2.91	0.870	4.46	1.08	5.05
2.75	3.70	2.34	2.76	0.821	4.34	1.00	5.21
3.00	3.54	2.44	2.63	0.775	4.23	0.924	5.38
3.25	3.41	2.52	2.51	0.740	4.12	0.864	5.52
3.50	3.30	2.60	2.41	0.709	4.03	0.811	5.66
3.75	3.19	2.69	2.32	0.681	3.94	0.762	5.78
4.0	3.10	2.77	2.24	0.658	3.86	0.722	5.88
4.5	3.00	2.92	2.15	0.632	3.77	0.677	6.02
5	2.93	3.07	2.09	0.615	3.71	0.649	6.11
6	2.82	3.35	1.99	0.588	3.60	0.604	6.26
7	2.73	3.63	1.91	0.567	3.51	0.568	6.39
8	2.66	3.90	1.85	0.552	3.45	0.543	6.48
9	2.62	4.17	1.82	0.543	3.40	0.527	6.54
10	2.60	4.43	1.80	0.539	3.38	0.520	6.57
12	2.64	4.95	1.83	0.547	3.42	0.533	6.52
14	2.75	5.49	1.93	0.571	3.53	0.575	6.36
16	2.85	6.05	2.02	0.596	3.64	0.617	6.21
18	2.95	6.63	2.11	0.620	3.73	0.658	6.08
20	3.02	7.23	2.17	0.638	3.80	0.689	5.98
$H = 30, V_\infty = 5000, R = 0$							
1.0	4.56	1.32	3.71	0.931	6.30	1.47	5.19
1.1	4.34	1.36	3.53	0.865	6.18	1.35	5.39
1.2	4.15	1.40	3.37	0.808	6.06	1.25	5.59
1.3	3.98	1.44	3.22	0.757	5.96	1.16	5.77
1.4	3.83	1.48	3.10	0.715	5.86	1.09	5.94
1.5	3.70	1.52	2.99	0.678	5.77	1.02	6.10
1.75	3.43	1.61	2.75	0.602	5.58	0.890	6.47
2.00	3.20	1.69	2.56	0.543	5.41	0.787	6.82
2.25	3.02	1.77	2.40	0.496	5.25	0.705	7.12
2.50	2.95	1.84	2.34	0.479	5.20	0.675	7.24
2.75	2.88	1.92	2.28	0.462	5.13	0.646	7.37
3.00	2.81	1.99	2.22	0.445	5.06	0.615	7.51
3.25	2.74	2.06	2.16	0.429	5.00	0.588	7.64
3.50	2.70	2.13	2.12	0.418	4.95	0.569	7.73
3.75	2.67	2.19	2.10	0.412	4.93	0.559	7.79
4.00	2.66	2.26	2.09	0.409	4.91	0.553	7.82
4.25	2.65	2.33	2.08	0.406	4.90	0.548	7.85
4.50	2.63	2.39	2.06	0.402	4.88	0.541	7.88
4.75	2.60	2.46	2.04	0.397	4.86	0.532	7.94
5.0	2.58	2.52	2.02	0.391	4.83	0.522	7.99
5.5	2.53	2.65	1.97	0.380	4.78	0.502	8.11
6.0	2.48	2.78	1.93	0.370	4.73	0.485	8.21
6.5	2.45	2.90	1.90	0.363	4.69	0.473	8.23

Table 15 Concluded

$\theta_b$	$r_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$p_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 5000, \bar{R} = 0$								
	7.0	2.44	3.02	1.89	0.360	4.68	0.468	8.32
	7.5	2.44	3.14	1.90	0.362	4.69	0.471	8.30
	8.0	2.47	3.27	1.92	0.367	4.71	0.480	8.24
	8.5	2.50	3.39	1.95	0.375	4.76	0.494	8.16
	9.0	2.52	3.52	1.97	0.379	4.78	0.501	8.11
	9.5	2.56	3.65	2.00	0.387	4.82	0.515	8.03
	10	2.60	3.77	2.04	0.397	4.86	0.531	7.94
	11	2.67	4.04	2.10	0.413	4.93	0.560	7.78
	12	2.76	4.31	2.18	0.433	5.02	0.594	7.61
	13	2.84	4.59	2.25	0.452	5.09	0.627	7.45
	14	2.90	4.88	2.30	0.467	5.15	0.655	7.33
	15	2.95	5.17	2.34	0.478	5.19	0.673	7.25
	16	2.98	5.47	2.37	0.485	5.22	0.686	7.20
	17	2.99	5.77	2.38	0.489	5.23	0.693	7.17
	18	3.00	6.07	2.39	0.491	5.24	0.696	7.16
	19	3.00	6.37	2.39	0.492	5.24	0.697	7.15
	20	3.00	6.67	2.39	0.491	5.24	0.696	7.16

Table 16

 $\theta_b = 20^\circ, \gamma = 1.4$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\rho_w$	$\xi \cdot 10$	$y_w$	$\rho_w$	$\xi \cdot 10$	$y_w$	$\rho_w$
$M_\infty = \infty$									
1.0	5.93	1.54	6	6.05	1.56	5.53	6.54	1.64	4.09
1.1	5.63	1.59	6	5.74	1.62	5.50	6.26	1.70	4.01
1.3	5.13	1.70	6	5.26	1.73	5.44	5.79	1.82	3.86
1.5	4.73	1.80	6	4.87	1.83	5.37	5.42	1.93	3.72
1.75	4.34	1.91	6	4.48	1.95	5.29	5.05	2.06	3.56
2.00	4.02	2.02	6	4.17	2.06	5.21	4.75	2.18	3.42
2.25	3.76	2.11	6	3.90	2.16	5.13	4.51	2.30	3.29
2.50	3.57	2.21	6	3.71	2.25	5.06	4.31	2.41	3.18
2.75	3.50	2.29	6	3.58	2.34	5.01	4.13	2.52	3.07
3.0	3.46	2.38	6	3.54	2.43	5.00	4.00	2.62	2.99
3.5	3.39	2.55	6	3.48	2.61	4.97	3.90	2.82	2.92
4.0	3.34	2.72	6	3.43	2.78	4.95	3.88	3.01	2.91
4.5	3.30	2.89	6	3.39	2.95	4.94	3.86	3.20	2.89
5	3.29	3.05	6	3.38	3.12	4.93	3.84	3.40	2.88
6	3.35	3.38	6	3.42	3.46	4.95	3.86	3.78	2.90
7	3.53	3.73	6	3.58	3.81	5.01	3.95	4.17	2.95
8	3.68	4.09	6	3.72	4.18	5.07	4.06	4.57	3.03
9	3.84	4.47	6	3.86	4.56	5.12	4.18	4.99	3.10
10	3.95	4.86	6	3.98	4.95	5.16	4.26	5.41	3.15
$M_\infty = 15$									
$M_\infty = 23$									
$M_\infty = 10$									
$M_\infty = 4$									
1.0	5.99	1.55	5.79	6.17	1.58	5.07	7.21	1.76	3.13
1.1	5.68	1.61	5.77	5.88	1.64	5.02	6.94	1.83	3.05
1.3	5.19	1.72	5.74	5.39	1.75	4.90	6.50	1.96	2.92
1.5	4.80	1.82	5.71	5.00	1.85	4.80	6.14	2.09	2.80
1.75	4.41	1.93	5.67	4.62	1.97	4.67	5.79	2.24	2.67
2.00	4.09	2.04	5.62	4.31	2.09	4.55	5.50	2.38	2.56
2.25	3.82	2.14	5.58	4.06	2.19	4.43	5.28	2.51	2.46
2.50	3.62	2.23	5.54	3.86	2.29	4.33	5.08	2.64	2.38
2.75	3.53	2.32	5.52	3.69	2.38	4.24	4.92	2.77	2.30
3.00	3.49	2.41	5.52	3.63	2.48	4.20	4.78	2.89	2.24
3.5	3.43	2.58	5.50	3.59	2.56	4.17	4.55	3.12	2.12
4.0	3.38	2.75	5.49	3.55	2.84	4.14	4.41	3.35	2.05
4.5	3.34	2.92	5.48	3.51	3.01	4.12	4.41	3.57	2.05
5	3.32	3.09	5.48	3.50	3.19	4.11	4.42	3.79	2.06
6	3.37	3.42	5.49	3.53	3.54	4.13	4.44	4.23	2.07
7	3.55	3.77	5.53	3.65	3.90	4.21	4.50	4.68	2.10
8	3.69	4.13	5.56	3.81	4.27	4.30	4.58	5.13	2.14
9	3.84	4.51	5.58	3.94	4.66	4.37	4.66	5.59	2.18
10	3.96	4.90	5.60	4.04	5.06	4.42	4.73	6.06	2.21

Table 17

 $\theta_b = 20^\circ$ 

$\lambda_W$	$\xi \cdot 10$	$y_W$	$\eta_W \cdot 10$	$i_W \cdot 10$	$p_W$	$p_W \cdot 10$	$\beta_W$
$H = 60, V_\infty = 10\ 000$							
1.0	5.21	1.33	4.65	1.08	11.4	1.96	6.24
1.1	4.92	1.38	4.38	0.993	11.1	1.78	6.47
1.2	4.66	1.43	4.15	0.910	11.0	1.63	6.73
1.3	4.42	1.47	3.95	0.839	11.0	1.49	7.04
1.4	4.22	1.52	3.78	0.775	11.1	1.38	7.41
1.5	4.04	1.56	3.62	0.722	11.1	1.28	7.83
1.75	3.68	1.66	3.29	0.618	10.5	1.09	8.54
2.00	3.45	1.74	3.07	0.554	10.0	0.969	8.96
2.25	3.36	1.83	2.98	0.528	9.85	0.920	9.12
2.50	3.30	1.91	2.92	0.511	9.68	0.888	9.23
2.75	3.25	1.99	2.88	0.499	9.56	0.865	9.31
3.0	3.22	2.08	2.85	0.490	9.47	0.849	9.36
3.5	3.20	2.24	2.82	0.484	9.40	0.837	9.40
4	3.23	2.40	2.86	0.493	9.49	0.854	9.34
5	3.50	2.73	3.12	0.566	10.1	0.992	8.88
6	3.74	3.10	3.35	0.635	10.7	1.12	8.44
7	3.87	3.48	3.47	0.672	10.9	1.19	8.18
8	3.87	3.87	3.46	0.671	10.9	1.19	8.19
9	3.82	4.25	3.43	0.659	10.8	1.16	8.27
10	3.78	4.63	3.39	0.646	10.7	1.14	8.36
$H_\infty = 60, V_\infty = 7500$							
1.0	5.31	1.35	4.68	1.13	10.6	2.00	5.90
1.1	5.01	1.40	4.41	1.04	10.2	1.82	6.17
1.2	4.77	1.45	4.19	0.964	9.84	1.68	6.39
1.3	4.56	1.49	3.99	0.898	9.47	1.55	6.58
1.4	4.37	1.54	3.81	0.840	9.12	1.44	6.76
1.5	4.20	1.58	3.65	0.788	8.79	1.34	6.92
2.05	3.64	1.79	3.11	0.622	7.63	1.03	7.46
2.55	3.48	1.97	2.96	0.578	7.31	0.949	7.62
3.05	3.39	2.14	2.87	0.552	7.12	0.900	7.73
3.55	3.30	2.31	2.79	0.529	6.97	0.858	7.82
4.05	3.29	2.48	2.77	0.526	6.95	0.851	7.83
4.55	3.40	2.64	2.88	0.555	7.14	0.905	7.71
5.05	3.53	2.82	3.00	0.591	7.41	0.973	7.58
5.55	3.62	2.99	3.09	0.617	7.59	1.02	7.48
6.05	3.71	3.18	3.18	0.643	7.77	1.07	7.39
6.55	3.81	3.37	3.27	0.670	7.95	1.12	7.29
7.05	3.88	3.56	3.34	0.692	8.12	1.16	7.22
7.55	3.92	3.75	3.38	0.703	8.20	1.18	7.19
8.05	3.92	3.95	3.38	0.705	8.22	1.18	7.18
8.55	3.93	4.15	3.38	0.705	8.22	1.18	7.18
9.05	3.92	4.34	3.38	0.704	8.21	1.18	7.18
9.55	3.91	4.54	3.37	0.702	8.19	1.18	7.19
10.0	3.90	4.72	3.36	0.699	8.17	1.17	7.20

Table 17 Continued

 $\theta_b = 20^\circ$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$R_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 7500$							
1.0	5.46	1.38	4.74	1.18	9.53	2.07	5.38
1.1	5.17	1.43	4.48	1.08	9.23	1.89	5.65
1.2	4.92	1.48	4.25	1.00	8.94	1.74	5.86
1.3	4.71	1.53	4.06	0.938	8.67	1.61	6.05
1.4	4.51	1.58	3.88	0.878	8.40	1.50	6.23
1.5	4.34	1.62	3.72	0.823	8.14	1.40	6.39
2.0	3.74	1.82	3.17	0.646	7.28	1.07	6.99
2.5	3.55	2.00	2.99	0.591	6.99	0.973	7.20
3.0	3.43	2.18	2.88	0.558	6.84	0.913	7.35
3.5	3.33	2.35	2.79	0.532	6.75	0.865	7.49
4.0	3.28	2.51	2.74	0.517	6.69	0.839	7.57
4.5	3.32	2.68	2.78	0.528	6.73	0.859	7.51
5.0	3.43	2.85	2.88	0.557	6.84	0.911	7.36
5.5	3.53	3.02	2.97	0.587	6.97	0.965	7.22
6.0	3.61	3.20	3.05	0.609	7.09	1.00	7.13
6.5	3.70	3.38	3.13	0.634	7.23	1.05	7.03
7.0	3.79	3.57	3.21	0.661	7.35	1.10	6.94
7.5	3.87	3.76	3.28	0.683	7.43	1.14	6.85
8.0	3.92	3.96	3.33	0.697	7.48	1.16	6.80
8.5	3.94	4.15	3.35	0.703	7.51	1.18	6.78
9.0	3.95	4.35	3.35	0.706	7.51	1.18	6.77
9.5	3.95	4.55	3.36	0.707	7.52	1.18	6.77
10.0	3.95	4.75	3.36	0.706	7.52	1.18	6.77
$H = 30, V_\infty = 6000$							
1.0	5.63	1.40	4.75	1.25	8.12	2.13	4.89
1.1	5.35	1.46	4.49	1.16	7.77	1.95	5.06
1.2	5.10	1.51	4.28	1.08	7.54	1.81	5.22
1.3	4.88	1.56	4.09	1.01	7.35	1.68	5.37
1.4	4.69	1.61	3.91	0.948	7.17	1.57	5.50
1.5	4.52	1.65	3.76	0.896	6.99	1.47	5.63
2.0	3.87	1.86	3.20	0.702	6.46	1.12	6.23
2.5	3.60	2.05	2.96	0.623	6.24	0.982	6.57
3.0	3.45	2.23	2.83	0.582	6.13	0.909	6.78
3.5	3.36	2.40	2.75	0.558	6.05	0.866	6.92
4.0	3.34	2.56	2.74	0.553	6.04	0.858	6.95
4.5	3.38	2.73	2.77	0.562	6.08	0.874	6.89
5.0	3.43	2.90	2.82	0.578	6.11	0.902	6.81
5.5	3.52	3.08	2.89	0.601	6.18	0.943	6.68
6.0	3.60	3.25	2.96	0.625	6.25	0.985	6.56
6.5	3.69	3.44	3.04	0.648	6.31	1.02	6.45
7.0	3.78	3.62	3.11	0.674	6.38	1.07	6.35
7.5	3.85	3.81	3.18	0.695	6.44	1.11	6.25
8.0	3.91	4.01	3.23	0.712	6.48	1.14	6.19

Table 17 Continued

 $\theta_b = 20^\circ$ 

$w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$p_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 5000$							
1.0	5.80	1.42	4.75	1.32	7.07	2.19	4.38
1.1	5.50	1.48	4.50	1.23	6.87	2.01	4.53
1.2	5.25	1.53	4.29	1.15	6.72	1.86	4.69
1.3	5.02	1.58	4.10	1.07	6.58	1.73	4.84
1.4	4.82	1.63	3.93	1.01	6.46	1.62	4.98
1.5	4.64	1.68	3.78	0.958	6.35	1.52	5.12
2.0	3.96	1.89	3.21	0.752	5.94	1.15	5.79
2.5	3.62	2.08	2.92	0.654	5.72	0.982	6.21
3.0	3.51	2.26	2.83	0.625	5.64	0.932	6.35
3.5	3.46	2.43	2.78	0.611	5.60	0.907	6.42
4.0	3.43	2.60	2.77	0.603	5.58	0.894	6.46
4.5	3.43	2.78	2.76	0.604	5.58	0.895	6.46
5.0	3.45	2.95	2.78	0.609	5.60	0.903	6.44
5.5	3.51	3.12	2.82	0.623	5.64	0.928	6.36
6.0	3.60	3.30	2.90	0.649	5.70	0.974	6.23
6.5	3.68	3.48	2.97	0.671	5.76	1.01	6.13
7.0	3.75	3.67	3.03	0.691	5.81	1.04	6.04
7.5	3.82	3.86	3.09	0.711	5.85	1.08	5.95
8.0	3.88	4.05	3.14	0.729	5.89	1.11	5.88
8.5	3.93	4.25	3.18	0.743	5.93	1.14	5.82
9.0	3.97	4.45	3.22	0.756	5.95	1.16	5.77
9.5	4.00	4.65	3.24	0.764	5.97	1.17	5.74
10.0	4.02	4.85	3.26	0.769	5.98	1.18	5.72
$H = 30, V_\infty = 4000$							
1.0	6.05	1.48	4.81	1.45	6.30	2.29	3.86
1.1	5.75	1.54	4.57	1.35	6.18	2.12	4.03
1.2	5.48	1.59	4.36	1.26	6.07	1.97	4.19
1.3	5.25	1.65	4.17	1.19	5.97	1.84	4.34
1.4	5.04	1.70	4.01	1.13	5.88	1.72	4.48
1.5	4.85	1.75	3.86	1.07	5.79	1.62	4.62
2.0	4.16	1.97	3.29	0.860	5.43	1.25	5.22
2.5	3.79	2.17	2.98	0.749	5.20	1.05	5.62
3.0	3.66	2.35	2.87	0.715	5.11	0.996	5.76
3.5	3.58	2.54	2.80	0.691	5.05	0.953	5.87
4.0	3.52	2.71	2.75	0.673	5.01	0.923	5.94
4.5	3.47	2.89	2.71	0.661	4.97	0.902	6.00
5.0	3.45	3.06	2.69	0.657	4.96	0.895	6.02
5.5	3.47	3.23	2.70	0.660	4.97	0.900	6.00
6.0	3.51	3.41	2.74	0.672	5.00	0.921	5.95
6.5	3.58	3.59	2.80	0.692	5.06	0.956	5.86
7.0	3.65	3.77	2.86	0.711	5.11	0.989	5.78
7.5	3.71	3.95	2.91	0.728	5.15	1.01	5.70
8.0	3.78	4.14	2.97	0.746	5.19	1.05	5.63
8.5	3.84	4.33	3.02	0.764	5.23	1.08	5.56
9.0	3.90	4.52	3.07	0.781	5.27	1.11	5.49
9.5	3.95	4.72	3.11	0.796	5.30	1.13	5.44
10.0	3.99	4.92	3.15	0.808	5.33	1.16	5.40

Table 17 Continued

 $\theta_b = 20^\circ$ 

$x_w$	$\xi \cdot 10$	$y_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$p_w \cdot 10$	$\beta_w$
$H = 30, V_\infty = 3000$							
1.0	6.24	1.53	4.77	1.61	5.52	2.36	3.45
1.1	5.92	1.60	4.54	1.51	5.41	2.19	3.61
1.2	5.67	1.65	4.34	1.43	5.32	2.05	3.74
1.3	5.43	1.71	4.16	1.35	5.23	1.92	3.88
1.4	5.23	1.76	4.00	1.29	5.14	1.80	4.00
1.5	5.05	1.81	3.85	1.23	5.06	1.70	4.12
2.05	4.28	2.07	3.24	0.997	4.67	1.29	4.67
2.55	3.88	2.27	2.91	0.879	4.42	1.09	5.02
3.05	3.75	2.46	2.79	0.840	4.33	1.02	5.15
3.55	3.66	2.65	2.71	0.815	4.27	0.979	5.24
4.05	3.59	2.83	2.66	0.796	4.22	0.947	5.30
4.55	3.54	3.01	2.62	0.784	4.19	0.924	5.35
5.05	3.53	3.18	2.60	0.778	4.18	0.915	5.37
5.55	3.53	3.36	2.60	0.779	4.17	0.917	5.37
6.05	3.56	3.54	2.63	0.787	4.20	0.930	5.34
6.55	3.61	3.72	2.67	0.801	4.23	0.955	5.29
7.05	3.68	3.90	2.73	0.821	4.29	0.990	5.21
7.55	3.75	4.08	2.79	0.841	4.33	1.02	5.15
8.05	3.81	4.27	2.84	0.858	4.37	1.05	5.09
8.55	3.87	4.47	2.89	0.875	4.41	1.08	5.03
9.05	3.93	4.66	2.94	0.892	4.45	1.11	4.98
9.55	3.98	4.86	2.99	0.907	4.48	1.13	4.93
$H = 10, V_\infty = 5000$							
1.0	5.85	1.44	4.77	1.33	6.97	2.21	4.26
1.1	5.55	1.50	4.53	1.24	6.78	2.03	4.43
1.2	5.29	1.55	4.32	1.16	6.69	1.88	4.61
1.3	5.06	1.60	4.13	1.08	6.58	1.75	4.77
1.4	4.86	1.65	3.96	1.02	6.47	1.64	4.93
1.5	4.68	1.70	3.82	0.967	6.38	1.54	5.09
2.0	3.99	1.92	3.24	0.758	5.98	1.17	5.76
2.5	3.63	2.11	2.94	0.655	5.75	0.992	6.20
3.0	3.54	2.29	2.86	0.631	5.69	0.946	6.32
3.5	3.48	2.46	2.80	0.612	5.64	0.914	6.42
4.0	3.42	2.63	2.76	0.598	5.60	0.890	6.49
4.5	3.41	2.81	2.74	0.593	5.59	0.881	6.52
5.0	3.41	2.98	2.75	0.595	5.60	0.884	6.51
5.5	3.46	3.15	2.78	0.607	5.63	0.905	6.44
6.0	3.54	3.32	2.85	0.630	5.69	0.945	6.32
6.5	3.63	3.50	2.93	0.653	5.75	0.987	6.21
7.0	3.69	3.69	2.98	0.672	5.79	1.01	6.12
7.5	3.76	3.87	3.04	0.692	5.84	1.05	6.03
8.0	3.83	4.06	3.10	0.712	5.88	1.09	5.95
8.5	3.89	4.26	3.15	0.729	5.92	1.12	5.83
9.0	3.94	4.45	3.19	0.743	5.95	1.14	5.82
9.5	3.98	4.65	3.23	0.754	5.98	1.16	5.77
10.0	4.00	4.85	3.25	0.762	5.99	1.17	5.74

Table 17 Concluded

 $\theta_b = 20^\circ$ 

$i_w$	$\xi \cdot 10$	$\gamma_w$	$\eta_w \cdot 10$	$i_w \cdot 10$	$\rho_w$	$\rho_w \cdot 10$	$\beta_w$
$H = 10, V_\infty = 3000$							
1.0	6.21	1.53	4.75	1.59	5.53	2.35	3.47
1.1	5.91	1.59	4.53	1.50	5.43	2.18	3.63
1.2	5.64	1.65	4.33	1.41	5.33	2.03	3.77
1.3	5.41	1.71	4.15	1.34	5.24	1.90	3.90
1.4	5.21	1.76	3.99	1.27	5.16	1.79	4.02
1.5	5.02	1.81	3.84	1.21	5.08	1.69	4.14
2.0	4.33	2.04	3.28	1.00	4.73	1.31	4.65
2.5	3.88	2.25	2.91	0.872	4.46	1.09	5.04
3.0	3.73	2.44	2.78	0.827	4.36	1.01	5.19
3.5	3.65	2.62	2.72	0.805	4.30	0.975	5.27
4.0	3.58	2.80	2.66	0.787	4.26	0.944	5.33
4.5	3.54	2.98	2.62	0.774	4.22	0.921	5.38
5.0	3.52	3.16	2.60	0.768	4.21	0.912	5.41
5.5	3.52	3.34	2.61	0.769	4.21	0.914	5.40
6.0	3.55	3.51	2.63	0.777	4.23	0.927	5.37
6.5	3.60	3.69	2.68	0.791	4.27	0.951	5.32
7.0	3.67	3.87	2.73	0.811	4.32	0.985	5.25
7.5	3.74	4.06	2.80	0.832	4.37	1.022	5.17
8.0	3.81	4.25	2.85	0.849	4.41	1.052	5.11
8.5	3.87	4.44	2.90	0.866	4.45	1.081	5.05
9.0	3.92	4.63	2.95	0.883	4.49	1.110	5.00
9.5	3.98	4.83	2.99	0.899	4.52	1.137	4.95
10.0	4.02	5.03	3.03	0.912	4.55	1.160	4.91
$H = 30, V_\infty = 5000, \bar{R} = 0$							
1.0	4.54	1.31	3.70	0.928	6.30	1.46	5.20
1.1	4.32	1.36	3.51	0.860	6.17	1.34	5.41
1.2	4.13	1.40	3.35	0.803	6.05	1.24	5.60
1.3	3.96	1.44	3.21	0.753	5.95	1.15	5.78
1.4	3.81	1.48	3.08	0.709	5.85	1.08	5.96
1.5	3.67	1.52	2.96	0.668	5.75	1.00	6.14
2.0	3.49	1.70	2.81	0.620	5.63	0.923	6.38
2.5	3.40	1.87	2.73	0.593	5.56	0.876	6.52
3.0	3.39	2.04	2.72	0.591	5.55	0.872	6.53
3.5	3.34	2.21	2.68	0.579	5.52	0.851	6.60
4.0	3.35	2.38	2.69	0.582	5.52	0.855	6.58
4.5	3.45	2.55	2.77	0.608	5.60	0.902	6.44
5.0	3.55	2.72	2.86	0.635	5.67	0.950	6.30
5.5	3.66	2.90	2.96	0.667	5.75	1.006	6.15
6.0	3.75	3.09	3.03	0.692	5.81	1.049	6.04
6.5	3.84	3.28	3.11	0.718	5.87	1.097	5.92
7.0	3.92	3.47	3.18	0.741	5.92	1.137	5.83
7.5	3.98	3.67	3.23	0.758	5.96	1.166	5.76
8.0	4.01	3.87	3.25	0.766	5.98	1.181	5.73
8.5	4.03	4.07	3.27	0.772	5.99	1.192	5.71
9.0	4.03	4.27	3.27	0.774	5.99	1.195	5.70
9.5	4.03	4.47	3.27	0.774	5.99	1.195	5.70
10.0	4.03	4.68	3.27	0.773	5.99	1.193	5.71

Table 18

 $\theta_b = 0^\circ, \gamma = 1.4$ 

$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$C_x \cdot 10$	$i_b \cdot 10$	$p_b \cdot 10$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$C_x \cdot 10$	
$M_\infty = \infty$				$M_\infty = 15$				$M_\infty = 6$			
1.0	1.91	0.317	8.81	1.98	0.331	8.78	1.0	2.32	0.400	8.75	
1.2	1.88	0.303	8.81	1.95	0.317	8.78	1.2	2.30	0.389	8.75	
1.5	1.85	0.284	8.81	1.91	0.298	8.78	1.5	2.27	0.376	8.75	
2.5	1.73	0.225	8.81	1.80	0.242	8.78	2.5	2.19	0.328	8.75	
3.5	1.63	0.183	8.81	1.71	0.200	8.78	3.5	2.11	0.288	8.75	
4.5	1.55	0.153	8.81	1.63	0.169	8.78	4.5	2.04	0.259	8.75	
5.5	1.48	0.130	8.81	1.56	0.146	8.78	5.5	1.99	0.237	8.75	
6.5	1.42	0.113	8.81	1.51	0.129	8.78	6.5	1.95	0.222	8.75	
7.5	1.37	0.0998	8.81	1.46	0.115	8.78	7.5	1.92	0.210	8.75	
8.5	1.32	0.0891	8.81	1.42	0.104	8.78	8.5	1.90	0.201	8.75	
9.5	1.29	0.0807	8.81	1.38	0.0960	8.78	9.5	1.88	0.194	8.75	
10.5	1.25	0.0737	8.81	1.35	0.0888	8.78	10.5	1.87	0.189	8.75	
12.5	1.20	0.0625	8.81	1.30	0.0772	8.78	12.5	1.85	0.182	8.75	
14.5	1.15	0.0544	8.81	1.26	0.0693	8.78	14.5	1.83	0.178	8.75	
16.5	1.11	0.0482	8.81	1.23	0.0631	8.78	16.5	1.83	0.175	8.75	
18.5	1.08	0.0433	8.81	1.20	0.0583	8.78	18.5	1.82	0.174	8.75	
20.5	1.05	0.0392	8.81	1.18	0.0544	8.78	20.5	1.82	0.173	8.75	
25.5	0.992	0.0321	8.81	1.13	0.0475	8.78	25.5	1.82	0.174	8.75	
30.5	0.946	0.0271	8.81	1.10	0.0427	8.78	30.5	1.83	0.176	8.75	
40.5	0.879	0.0209	8.81	1.05	0.0367	8.78	40.5	1.84	0.181	8.75	
50.5	0.829	0.0171	8.81	1.02	0.0333	8.78	50.5	1.86	0.185	8.75	
60.5	0.791	0.0145	8.81	1.00	0.0312	8.78	60.5	1.87	0.189	8.75	
80.5	0.732	0.0110	8.81	0.983	0.0287	8.78	80.5	1.88	0.193	8.75	
100	0.686	0.00883	8.81	0.972	0.0277	8.78	100	1.88	0.194	8.75	
$M_\infty = 23$				$M_\infty = 10$				$M_\infty = 4$			
1.0	1.94	0.324	8.79	2.05	0.346	8.76	1.0	2.83	0.494	8.61	
1.2	1.91	0.310	8.79	2.03	0.334	8.76	1.2	2.83	0.497	8.61	
1.5	1.88	0.291	8.79	2.00	0.317	8.76	1.5	2.83	0.497	8.61	
2.5	1.76	0.233	8.79	1.89	0.261	8.76	2.5	2.79	0.472	8.61	
3.5	1.66	0.191	8.79	1.80	0.219	8.76	3.5	2.74	0.444	8.61	
4.5	1.58	0.160	8.79	1.72	0.189	8.76	4.5	2.70	0.424	8.61	
5.5	1.51	0.137	8.79	1.66	0.165	8.76	5.5	2.68	0.410	8.61	
6.5	1.46	0.120	8.79	1.61	0.148	8.76	6.5	2.66	0.402	8.61	
7.5	1.41	0.106	8.79	1.57	0.135	8.76	7.5	2.65	0.398	8.61	
8.5	1.37	0.0960	8.79	1.53	0.124	8.76	8.5	2.65	0.395	8.61	
9.5	1.33	0.0872	8.79	1.50	0.115	8.76	9.5	2.65	0.394	8.61	
10.5	1.30	0.0800	8.79	1.47	0.108	8.76	10.5	2.65	0.394	8.61	
12.5	1.24	0.0691	8.79	1.43	0.0978	8.76	12.5	2.65	0.397	8.61	
14.5	1.20	0.0605	8.79	1.39	0.0902	8.76	14.5	2.66	0.401	8.61	
16.5	1.16	0.0543	8.79	1.37	0.0845	8.76	16.5	2.67	0.405	8.61	
18.5	1.13	0.0495	8.79	1.35	0.0802	8.76	18.5	2.68	0.409	8.61	
20.5	1.10	0.0455	8.79	1.33	0.0769	8.76	20.5	2.68	0.413	8.61	
25.5	1.05	0.0382	8.79	1.30	0.0708	8.76	25.5	2.70	0.421	8.61	
30.5	1.01	0.0334	8.79	1.28	0.0672	8.76	30.5	2.71	0.428	8.61	
40.5	0.955	0.0272	8.79	1.26	0.0634	8.76	40.5	2.72	0.435	8.61	
50.5	0.914	0.0233	8.79	1.25	0.0619	8.76	50.5	2.73	0.439	8.61	
60.5	0.884	0.0207	8.79	1.25	0.0616	8.76	60.5	2.73	0.441	8.61	
80.5	0.842	0.0174	8.79	1.26	0.0626	8.76	80.5	2.74	0.443	8.61	
100	0.812	0.0154	8.79	1.27	0.0641	8.76	110	2.74	0.444	8.61	
150				1.28	0.0674	8.76					
200				1.29	0.0692	8.76					

Table 19

 $\partial_b = 0^\circ$ 

$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$\rho_b$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$\rho_b$	$C_x \cdot 10$
<b><math>H = 60, V_\infty = 10\ 000</math></b>									
1.0	3.41	8.71	0.287	2.76	8.77	1.0	3.24	8.44	0.376
1.2	3.37	8.09	0.262	2.80	8.77	1.2	3.21	7.83	0.343
1.5	3.34	7.33	0.234	2.86	8.77	1.5	3.16	7.08	0.306
2.5	3.25	5.75	0.178	3.01	8.77	2.5	3.02	5.35	0.223
3.5	3.19	4.84	0.146	3.11	8.77	3.5	2.92	4.32	0.175
4.5	3.14	4.15	0.123	3.20	8.77	4.5	2.84	3.63	0.144
5.5	3.09	3.60	0.105	3.27	8.77	5.5	2.79	3.19	0.124
6.5	3.05	3.18	0.0915	3.34	8.77	6.5	2.75	2.91	0.112
7.5	3.02	2.88	0.0818	3.40	8.77	7.5	2.71	2.68	0.102
8.5	2.99	2.64	0.0743	3.44	8.77	8.5	2.68	2.48	0.0938
9.5	2.97	2.44	0.0681	3.48	8.77	9.5	2.65	2.31	0.0866
10.5	2.95	2.29	0.0633	3.52	8.77	10.5	2.62	2.16	0.0804
12.5	2.92	2.07	0.0567	3.57	8.77	12.5	2.57	1.90	0.0697
14.5	2.90	1.92	0.0520	3.61	8.77	14.5	2.52	1.71	0.0617
16.5	2.87	1.78	0.0478	3.65	8.77	16.5	2.49	1.56	0.0556
18.5	2.85	1.65	0.0440	3.69	8.77	18.5	2.45	1.43	0.0507
20.5	2.83	1.54	0.0405	3.73	8.77	20.5	2.42	1.33	0.0466
25.5	2.78	1.31	0.0340	3.81	8.77	25.5	2.36	1.14	0.0393
30.5	2.75	1.15	0.0296	3.87	8.77	30.5	2.32	1.01	0.0343
40.5	2.69	0.948	0.0237	3.97	8.77	40.5	2.25	0.844	0.0278
50.5	2.65	0.815	0.0201	4.04	8.77	50.5	2.20	0.731	0.0237
60.5	2.62	0.723	0.0175	4.10	8.77	60.5	2.15	0.651	0.0208
80.5	2.56	0.592	0.0141	4.20	8.77	80.5	2.09	0.550	0.0172
100	2.53	0.515	0.0120	4.27	8.77	100	2.05	0.489	0.0150
						150	1.99	0.410	0.0123
						200	1.96	0.374	0.0111
						260	1.94	0.351	0.0103
<b><math>H = 60, V_\infty = 7500</math></b>									
1.00	3.46	8.92	0.355	2.48	9.11				
1.20	3.42	8.16	0.321	2.53	9.11				
1.50	3.37	7.27	0.283	2.60	9.11	1.0	3.05	7.58	0.376
2.55	3.24	5.36	0.202	2.76	9.11	1.2	3.00	6.95	0.339
3.55	3.15	4.33	0.159	2.87	9.11	1.5	2.93	6.18	0.296
4.55	3.08	3.66	0.132	2.96	9.11	2.5	2.78	4.70	0.214
5.55	3.03	3.19	0.114	3.03	9.11	3.5	2.70	4.07	0.180
6.55	2.99	2.89	0.102	3.08	9.11	4.5	2.64	3.63	0.157
7.55	2.96	2.69	0.0945	3.12	9.11	5.5	2.59	3.27	0.139
8.55	2.94	2.52	0.0878	3.15	9.11	6.5	2.54	2.98	0.124
9.55	2.91	2.36	0.0819	3.18	9.11	7.5	2.50	2.73	0.111
10.5	2.89	2.22	0.0765	3.21	9.11	8.5	2.46	2.52	0.101
12.5	2.85	1.98	0.0673	3.27	9.11	9.5	2.42	2.32	0.0923
14.5	2.81	1.77	0.0598	3.32	9.11	10.5	2.39	2.18	0.0850
16.5	2.77	1.61	0.0538	3.37	9.11	12.5	2.33	1.94	0.0734
18.5	2.74	1.48	0.0491	3.41	9.11	14.5	2.29	1.77	0.0651
20.5	2.71	1.38	0.0452	3.45	9.11	16.5	2.25	1.63	0.0589
25.5	2.66	1.17	0.0380	3.52	9.11	18.5	2.22	1.52	0.0541
30.5	2.61	1.04	0.0333	3.58	9.11	20.5	2.20	1.43	0.0502
40.5	2.55	0.873	0.0273	3.66	9.11	25.5	2.14	1.26	0.0427
50.5	2.50	0.758	0.0234	3.73	9.11	30.5	2.10	1.13	0.0375
60.5	2.47	0.678	0.0207	3.78	9.11	40.5	2.04	0.968	0.0309
80.5	2.41	0.577	0.0173	3.86	9.11	50.5	1.99	0.860	0.0269
100	2.38	0.515	0.0153	3.91	9.11	60.5	1.96	0.785	0.0241
110	2.36	0.493	0.0146	3.93	9.11	80.5	1.91	0.689	0.0206
						100	1.88	0.632	0.0186

Table 19 Continued

$\theta_b = 0^\circ$															
$x_b$	$i_b \cdot 10$	$\rho_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$\rho_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$				
$H = 30, V_\infty = 5000$										$H = 30, V_\infty = 4000$					
1.0	2.92	7.44	0.362	2.55	9	60.5	1.75	0.936	0.0384	3.59	9.07				
1.2	2.88	7.04	0.336	2.59	9	80.5	1.72	0.890	0.0362	3.62	9.07				
1.5	2.86	6.58	0.310	2.64	9	100	1.71	0.877	0.0355	3.63	9.07				
2.5	2.75	5.49	0.251	2.77	9	150	1.72	0.889	0.0361	3.62	9.07				
3.5	2.67	4.74	0.211	2.87	9	200	1.74	0.918	0.0375	3.60	9.07				
4.5	2.60	4.13	0.180	2.96	9	230	1.75	0.937	0.0384	3.59	9.07				
5.5	2.53	3.63	0.155	3.04	9	$H = 30, V_\infty = 3000$									
6.5	2.48	3.23	0.135	3.12	9	1.00	2.61	6.88	0.447	2.32	9.1				
7.5	2.43	2.91	0.120	3.19	9	1.20	2.56	6.47	0.417	2.37	9.1				
8.5	2.38	2.66	0.108	3.24	9	1.50	2.50	5.98	0.377	2.42	9.1				
9.5	2.35	2.46	0.0988	3.29	9	2.55	2.23	4.84	0.288	2.58	9.1				
10.5	2.32	2.29	0.0913	3.33	9	3.55	2.22	4.16	0.237	2.69	9.1				
12.5	2.26	2.04	0.0798	3.40	9	4.55	2.13	3.67	0.202	2.79	9.1				
14.5	2.22	1.85	0.0715	3.46	9	5.55	2.06	3.30	0.176	2.87	9.1				
16.5	2.18	1.70	0.0649	3.51	9	6.55	2.00	3.03	0.158	2.94	9.1				
18.5	2.15	1.58	0.0597	3.55	9	7.55	1.95	2.81	0.143	2.99	9.1				
20.5	2.12	1.48	0.0555	3.59	9	8.55	1.91	2.64	0.132	3.05	9.1				
25.5	2.07	1.29	0.0475	3.67	9	9.55	1.87	2.49	0.122	3.09	9.1				
30.5	2.02	1.17	0.0422	3.73	9	10.5	1.84	2.36	0.114	3.13	9.1				
40.5	1.96	1.00	0.0355	3.81	9	12.5	1.78	2.14	0.100	3.22	9.1				
50.5	1.92	0.902	0.0314	3.87	9	14.5	1.73	1.97	0.0902	3.28	9.1				
60.5	1.89	0.834	0.0287	3.92	9	16.5	1.70	1.87	0.0843	3.32	9.1				
80.5	1.85	0.753	0.0256	3.97	9	18.5	1.68	1.81	0.0808	3.35	9.1				
100	1.83	0.710	0.0239	4.00	9	20.5	1.66	1.76	0.0780	3.37	9.1				
150	1.81	0.676	0.0226	4.03	9	25.5	1.64	1.68	0.0735	3.41	9.1				
200	1.81	0.677	0.0227	4.03	9	30.5	1.61	1.62	0.0699	3.44	9.1				
250	1.81	0.685	0.0230	4.02	9	40.5	1.59	1.54	0.0655	3.48	9.1				
$H = 30, V_\infty = 4000$										50.5	1.58	1.51	0.0639	3.50	9.1
1.0	2.94	7.86	0.450	2.38	9.07	60.5	1.57	1.51	0.0636	3.50	9.1				
1.2	2.91	7.44	0.422	2.41	9.07	80.5	1.58	1.53	0.0646	3.49	9.1				
1.5	2.86	6.89	0.386	2.46	9.07	100	1.59	1.55	0.0661	3.48	9.1				
2.5	2.72	5.48	0.297	2.60	9.07	150	1.61	1.62	0.0696	3.45	9.1				
3.5	2.60	4.48	0.236	2.72	9.07	200	1.62	1.64	0.0712	3.43	9.1				
4.5	2.50	3.81	0.196	2.81	9.07	220	1.62	1.65	0.0716	3.43	9.1				
5.5	2.42	3.31	0.166	2.89	9.07	$H = 10, V_\infty = 5000$									
6.5	2.35	2.95	0.146	2.96	9.07	1.0	2.81	7.32	0.378	2.58	9.09				
7.5	2.30	2.68	0.131	3.01	9.07	1.2	2.79	7.03	0.359	2.62	9.09				
8.5	2.25	2.46	0.119	3.06	9.07	1.5	2.75	6.59	0.333	2.66	9.09				
9.5	2.21	2.29	0.109	3.10	9.07	2.5	2.63	5.33	0.258	2.77	9.09				
10.5	2.17	2.14	0.101	3.14	9.07	3.5	2.53	4.52	0.213	2.86	9.09				
12.5	2.11	1.92	0.0893	3.20	9.07	4.5	2.45	3.91	0.179	2.96	9.09				
14.5	2.07	1.75	0.0803	3.25	9.07	5.5	2.38	3.42	0.154	3.04	9.09				
16.5	2.02	1.62	0.0734	3.29	9.07	6.5	2.33	3.06	0.135	3.11	9.09				
18.5	1.99	1.51	0.0676	3.33	9.07	7.5	2.27	2.77	0.120	3.18	9.09				
20.5	1.95	1.42	0.0628	3.37	9.07	8.5	2.23	2.54	0.108	3.23	9.09				
25.5	1.89	1.24	0.0537	3.44	9.07	9.5	2.19	2.35	0.0989	3.28	9.09				
30.5	1.85	1.14	0.0489	3.48	9.07	10.5	2.16	2.19	0.0911	3.33	9.09				
40.5	1.80	1.04	0.0438	3.53	9.07										
50.5	1.77	0.983	0.0406	3.57	9.07										

Table 19 Concluded

 $\theta_b = 0^\circ$ 

$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$
$H = 10, V_\infty = 5000$					$H = 30, V_\infty = 5000, \bar{R} = 0$				
12.5	2.10	1.95	0.0798	3.40 9.05	0.227	3.02	8.84	0.442	2.42 14.6
14.5	2.06	1.77	0.0713	3.45 9.09	0.3	3.04	9.21	0.464	2.39 14.6
16.5	2.02	1.63	0.0647	3.51 9.09	0.4	3.03	9.08	0.456	2.40 14.6
18.5	1.99	1.52	0.0595	3.55 9.09	0.5	3.00	8.64	0.430	2.44 14.6
20.5	1.96	1.42	0.0551	3.59 9.09	0.6	2.97	8.18	0.403	2.48 14.6
25.5	1.90	1.24	0.0472	3.67 9.09	0.7	2.94	7.77	0.379	2.52 14.6
30.5	1.85	1.12	0.0419	3.73 9.09	0.8	2.92	7.43	0.359	2.55 14.6
40.5	1.79	0.965	0.0352	3.82 9.09	0.9	2.90	7.18	0.344	2.58 14.6
50.5	1.74	0.866	0.0310	3.88 9.09	1.0	2.88	7.01	0.334	2.60 14.6
60.5	1.71	0.800	0.0283	3.93 9.09	1.1	2.87	6.86	0.326	2.61 14.6
80.5	1.67	0.720	0.0250	3.99 9.09	1.2	2.86	6.71	0.318	2.63 14.6
100	1.64	0.678	0.0233	4.02 9.09	1.3	2.85	6.63	0.313	2.64 14.6
150	1.62	0.643	0.0219	4.05 9.09	1.4	2.85	6.57	0.310	2.64 14.6
200	1.62	0.644	0.0220	4.05 9.09	1.5	2.84	6.46	0.304	2.65 14.6
220	1.62	0.647	0.0221	4.05 9.09	2.5	2.75	5.54	0.253	2.76 14.6
$H = 10, V_\infty = 3000$					3.5	2.65	4.60	0.204	2.89 14.6
1.0	2.51	6.63	0.420	2.39 9.03	4.5	2.56	3.83	0.165	3.01 14.6
1.2	2.47	6.32	0.396	2.43 9.03	6.5	2.48	3.24	0.136	3.12 14.6
1.5	2.42	5.94	0.365	2.48 9.03	7.5	2.41	2.81	0.115	3.21 14.6
2.5	2.28	4.91	0.287	2.62 9.03	8.5	2.36	2.51	0.101	3.28 14.6
3.5	2.17	4.24	0.237	2.74 9.03	9.5	2.22	2.30	0.0916	3.33 14.6
4.5	2.08	3.74	0.201	2.84 9.03	10.5	2.29	2.15	0.0846	3.37 14.6
5.5	2.01	3.36	0.176	2.92 9.03	11.5	2.26	2.02	0.0791	3.41 14.6
6.5	1.95	3.08	0.157	2.99 9.03	12.5	2.24	1.92	0.0744	3.44 14.6
7.5	1.90	2.86	0.142	3.05 9.03	13.5	2.22	1.83	0.0705	3.47 14.6
8.5	1.86	2.68	0.132	3.10 9.03	14.5	2.20	1.75	0.0669	3.50 14.6
9.5	1.82	2.53	0.121	3.15 9.03	15.5	2.18	1.67	0.0636	3.52 14.6
10.5	1.79	2.41	0.113	3.19 9.03	16.5	2.16	1.61	0.0607	3.55 14.6
12.5	1.74	2.22	0.102	3.26 9.03	17.5	2.14	1.54	0.0579	3.57 14.6
14.5	1.70	2.07	0.0935	3.31 9.03	18.5	2.12	1.48	0.0555	3.59 14.6
16.5	1.67	1.97	0.0875	3.35 9.03	19.5	2.11	1.43	0.0532	3.61 14.6
18.5	1.65	1.88	0.0825	3.39 9.03	20.5	2.10	1.38	0.0512	3.63 14.6
20.5	1.62	1.81	0.0785	3.42 9.03	50.5	2.08	1.34	0.0494	3.65 14.6
25.5	1.59	1.69	0.0720	3.48 9.03	100	1.89	0.831	0.0286	3.92 14.6
30.5	1.56	1.62	0.0679	3.52 9.03	140	1.81	0.684	0.0229	4.02 14.6
40.5	1.54	1.54	0.0636	3.56 9.03	190	1.81	0.670	0.0224	4.03 14.6
50.5	1.52	1.51	0.0618	3.58 9.03				0.0229	4.02 14.6
60.5	1.52	1.50	0.0614	3.58 9.03					
80.5	1.53	1.52	0.0621	3.57 9.03					
100	1.53	1.54	0.0635	3.56 9.03					

Table 20

 $\theta_b = 2^\circ.5, \gamma = 1.4$ 

$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$C_x \cdot 10$	$i_b \cdot 10$	$p_b \cdot 10$	$C_x \cdot 10$
$M_\infty = \infty$						
0.956	2.02	0.386	8.83	2.43	0.475	8.77
1.0	2.01	0.381	8.80	2.43	0.472	8.73
1.2	1.98	0.362	8.66	2.41	0.461	8.59
1.5	1.94	0.335	8.46	2.38	0.442	8.38
2.5	1.80	0.260	7.82	2.28	0.377	7.74
3.5	1.69	0.208	7.26	2.19	0.328	7.17
4.5	1.60	0.172	6.73	2.12	0.293	6.65
5.5	1.53	0.146	6.29	2.07	0.269	6.19
6.5	1.47	0.126	5.87	2.03	0.252	5.77
7.5	1.41	0.111	5.49	2.00	0.240	5.39
8.5	1.37	0.100	5.15	1.98	0.231	5.05
9.5	1.33	0.0908	4.84	1.96	0.224	4.73
10.5	1.30	0.0832	4.56	1.95	0.219	4.45
12.5	1.24	0.0714	4.06	1.93	0.212	3.95
14.5	1.20	0.0628	3.64	1.92	0.208	3.53
16.5	1.16	0.0561	3.28	1.92	0.206	3.18
18.5	1.13	0.0509	2.97	1.91	0.206	2.87
20.5	1.10	0.0467	2.71	1.91	0.205	2.61
25.5	1.05	0.0390	2.18	1.92	0.207	2.09
30.5	1.00	0.0338	1.80	1.93	0.210	1.71
40.5	0.946	0.0271	1.29	1.94	0.216	1.22
50.5	0.899	0.0227	0.971	1.95	0.220	0.921
60.5	0.863	0.0196	0.760	1.96	0.223	0.720
80.5	0.812	0.0159	0.503	1.97	0.226	0.490
100	0.779	0.0137	0.361	1.97	0.227	0.361
150	0.733	0.0111	0.194			
190	0.716	0.0102	0.135	$M_\infty = 6$		
$M_\infty = 10$						
0.956	2.16	0.418	8.81	2.96	0.585	8.64
1.0	2.16	0.413	8.77	2.96	0.584	8.60
1.2	2.13	0.398	8.63	2.96	0.584	8.45
1.5	2.10	0.373	8.43	2.96	0.579	8.24
2.5	1.97	0.301	7.79	2.90	0.537	7.60
3.5	1.87	0.250	7.22	2.84	0.502	7.02
4.5	1.78	0.213	6.71	2.80	0.478	6.51
5.5	1.72	0.187	6.25	2.77	0.462	6.05
6.5	1.67	0.167	5.83	2.76	0.453	5.63
7.5	1.62	0.153	5.45	2.75	0.448	5.25
8.5	1.59	0.141	5.11	2.74	0.445	4.91
9.5	1.56	0.132	4.80	2.74	0.444	4.60
10.5	1.53	0.125	4.51	2.74	0.444	4.32
12.5	1.49	0.114	4.02	2.74	0.446	3.84
14.5	1.46	0.106	3.59	2.75	0.450	3.43
16.5	1.44	0.100	3.23	2.76	0.453	3.09
18.5	1.42	0.0966	2.93	2.76	0.457	2.79
20.5	1.41	0.0933	2.66	2.77	0.460	2.53
25.5	1.38	0.0879	2.14	2.78	0.466	2.04
30.5	1.37	0.0850	1.76	2.79	0.471	1.68
40.5	1.36	0.0829	1.24	2.79	0.476	1.20
50.5	1.36	0.0833	0.933	2.80	0.477	0.914
60.5	1.37	0.0849	0.728	2.80	0.477	0.715
80.5	1.39	0.0886	0.481	2.80	0.478	0.492
100	1.40	0.0917	0.348	2.80	0.478	0.357
150	1.42	0.0959	0.199			
180	1.42	0.0968	0.157			

Table 21

 $\theta_b = 2^\circ.5$ 

$i_b$	$i_b \cdot 10$	$\rho_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_z \cdot 10$	$i_b$	$i_b \cdot 10$	$\rho_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_z \cdot 10$
$H = 30, V_\infty = 7500$											
0.956	3.32	9.75	0.440	2.38	9.11	50.5	2.08	1.09	0.0258	3.72	0.989
1.0	3.30	9.55	0.428	2.41	9.07	60.5	2.06	1.03	0.0234	3.77	0.771
1.2	3.26	8.78	0.390	2.46	8.93	80.5	2.04	0.972	0.0211	3.82	0.509
1.5	3.21	7.87	0.345	2.52	8.72	100	2.03	0.959	0.0206	3.83	0.364
2.5	3.08	5.84	0.246	2.70	8.06	150	2.05	1.01	0.0226	3.78	0.196
3.5	2.96	4.66	0.191	2.82	7.47						
4.5	2.88	3.94	0.158	2.92	6.94						
5.5	2.83	3.55	0.140	2.98	6.46	0.956	3.02	8.60	0.429	2.44	9.02
6.5	2.79	3.23	0.126	3.03	6.03	1.0	2.99	8.45	0.420	2.45	8.98
7.5	2.76	2.97	0.115	3.07	5.65	1.2	2.96	7.95	0.389	2.50	8.84
8.5	2.72	2.75	0.105	3.12	5.29	1.5	2.91	7.41	0.357	2.56	8.63
9.5	2.69	2.56	0.0972	3.15	4.97	2.5	2.81	6.12	0.285	2.69	7.99
10.5	2.66	2.39	0.0901	3.19	4.68	3.5	2.72	5.23	0.237	2.80	7.41
12.5	2.61	2.12	0.0789	3.25	4.17	4.5	2.65	4.55	0.203	2.90	6.89
14.5	2.57	1.92	0.0705	3.31	3.74	5.5	2.58	3.99	0.173	2.99	6.42
16.5	2.54	1.76	0.0640	3.35	3.37	6.5	2.51	3.46	0.146	3.08	5.99
18.5	2.51	1.64	0.0590	3.39	3.05	7.5	2.47	3.15	0.131	3.14	5.61
20.5	2.48	1.54	0.0550	3.42	2.78	8.5	2.43	2.92	0.120	3.19	5.26
25.5	2.43	1.35	0.0475	3.49	2.24	9.5	2.40	2.73	0.111	3.23	4.94
30.5	2.39	1.22	0.0423	3.55	1.84	10.5	2.37	2.57	0.104	3.26	4.65
40.5	2.32	1.04	0.0353	3.63	1.31	12.5	2.32	2.32	0.0924	3.33	4.14
50.5	2.29	0.933	0.0312	3.68	0.990	14.5	2.28	2.12	0.0834	3.38	3.71
60.5	2.26	0.863	0.0285	3.72	0.772	16.5	2.25	1.98	0.0771	3.42	3.34
80.5	2.22	0.784	0.0256	3.77	0.511	18.5	2.22	1.86	0.0718	3.46	3.03
100	2.21	0.750	0.0244	3.80	0.365	20.5	2.19	1.74	0.0664	3.50	2.76
150	2.21	0.757	0.0246	3.79	0.196	25.5	2.14	1.55	0.0584	3.57	2.22
180	2.22	0.788	0.0258	3.77	0.149	30.5	2.11	1.42	0.0526	3.62	1.83
$H = 30, V_\infty = 6000$											
0.956	3.13	8.75	0.445	2.35	9.13	50.5	2.02	1.17	0.0422	3.73	0.978
1.0	3.12	8.58	0.434	2.36	9.09	60.5	2.01	1.12	0.0401	3.75	0.762
1.2	3.07	7.83	0.389	2.42	8.95	80.5	1.99	1.08	0.0387	3.77	0.503
1.5	3.00	6.93	0.338	2.50	8.74	100	2.00	1.09	0.0390	3.77	0.359
2.5	2.84	5.27	0.245	2.66	8.08	140	2.02	1.15	0.0417	3.73	0.216
3.5	2.76	4.54	0.205	2.75	7.49						
4.5	2.70	4.02	0.177	2.82	6.96	0.956	3.04	8.96	0.525	2.29	9.09
5.5	2.64	3.61	0.156	2.88	6.48	1.0	3.03	8.84	0.517	2.30	9.06
6.5	2.59	3.27	0.139	2.93	6.05	1.2	2.99	8.35	0.482	2.34	8.92
7.5	2.55	2.99	0.124	2.98	5.66	1.5	2.94	7.69	0.438	2.39	8.72
8.5	2.50	2.76	0.113	3.03	5.31	2.5	2.78	6.03	0.331	2.54	8.07
9.5	2.47	2.57	0.103	3.08	4.98	3.5	2.65	4.89	0.261	2.67	7.49
10.5	2.44	2.41	0.0957	3.13	4.69	4.5	2.57	4.28	0.223	2.75	6.96
12.5	2.39	2.17	0.0841	3.22	4.18	5.5	2.49	3.77	0.194	2.82	6.49
14.5	2.35	1.99	0.0755	3.28	3.74	6.5	2.42	3.29	0.166	2.90	6.05
16.5	2.31	1.85	0.0690	3.31	3.38	7.5	2.36	2.99	0.148	2.95	5.67
18.5	2.28	1.74	0.0639	3.34	3.06	8.5	2.31	2.74	0.134	3.00	5.31
20.5	2.26	1.65	0.0597	3.37	2.79	9.5	2.27	2.55	0.124	3.04	4.99
25.5	2.21	1.47	0.0519	3.46	2.24	10.5	2.24	2.40	0.115	3.07	4.70
30.5	2.17	1.35	0.0466	3.54	1.85	12.5	2.18	2.16	0.102	3.13	4.18
40.5	2.12	1.19	0.0398	3.64	1.31	14.5	2.14	2.00	0.0936	3.18	3.75

Table 21 Concluded

 $\theta_b = 2^\circ.5$ 

$x_b$	$i_b \cdot 10$	$\rho_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$\rho_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x$
$H = 30, V_\infty = 4000$											
16.5	2.10	1.86	0.0861	3.22	3.38	5.55	2.12	3.62	0.198	2.80	6.46
18.5	2.06	1.74	0.0798	3.25	3.06	6.55	2.06	3.32	0.177	2.87	6.03
20.5	2.03	1.64	0.0745	3.29	2.78	7.55	2.01	3.09	0.162	2.92	5.61
25.5	1.98	1.48	0.0659	3.34	2.24	8.55	1.97	2.91	0.149	2.97	5.25
30.5	1.95	1.39	0.0614	3.38	1.84	9.55	1.94	2.75	0.139	3.01	4.97
40.5	1.91	1.30	0.0568	3.41	1.30	10.5	1.90	2.60	0.129	3.06	4.67
50.5	1.89	1.25	0.0543	3.43	0.981	12.5	1.84	2.37	0.114	3.13	4.16
60.5	1.88	1.23	0.0534	3.44	0.764	14.5	1.80	2.23	0.106	3.18	3.72
80.5	1.89	1.24	0.0540	3.44	0.503	16.5	1.78	2.15	0.101	3.21	3.35
100	1.90	1.28	0.0559	3.42	0.360	18.5	1.76	2.10	0.0978	3.23	3.03
150	1.94	1.38	0.0608	3.38	0.199	20.5	1.75	2.05	0.0952	3.25	2.76
$H = 30, V_\infty = 3000$											
0.956	2.72	7.72	0.529	2.23	9.12	40.5	1.70	1.88	0.0851	3.32	1.29
1.00	2.71	7.62	0.520	2.24	9.08	50.5	1.70	1.89	0.0854	3.32	0.96
1.20	2.66	7.22	0.481	2.30	8.94	60.5	1.71	1.91	0.0869	3.30	0.75
1.50	2.59	6.67	0.434	2.38	8.73	80.5	1.73	1.98	0.0907	3.28	0.47
2.55	2.41	5.35	0.327	2.56	8.05	100	1.75	2.03	0.0940	3.26	0.36
3.55	2.29	4.56	0.266	2.65	7.46	150	1.77	2.10	0.0981	3.23	0.23
4.55	2.19	4.00	0.226	2.72	6.94	160	1.77	2.11	0.0985	3.23	0.183

Table 22

 $\theta_b = 5^\circ, \gamma = 1.4$ 

$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$C_x \cdot 10$	$i_b \cdot 10$	$p_b \cdot 10$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$C_x \cdot 10$				
$M_\infty = \infty$					$M_\infty = 15$					$M_\infty = 6$				
0.913	2.12	0.465	8.88	2.19	0.478	8.84	0.913	2.55	0.565	8.82				
1.0	2.11	0.453	8.75	2.18	0.469	8.71	1.0	2.54	0.557	8.68				
1.2	2.08	0.429	8.49	2.15	0.447	8.45	1.2	2.52	0.542	8.41				
1.5	2.03	0.394	8.11	2.10	0.414	8.07	1.5	2.49	0.516	8.03				
2.5	1.88	0.301	7.01	1.96	0.323	6.97	2.5	2.37	0.435	6.92				
3.5	1.76	0.240	6.11	1.84	0.261	6.08	3.5	2.28	0.377	6.02				
4.5	1.67	0.198	5.38	1.75	0.220	5.35	4.5	2.21	0.339	5.28				
5.5	1.59	0.169	4.77	1.69	0.191	4.74	5.5	2.16	0.315	4.68				
6.5	1.53	0.148	4.26	1.63	0.170	4.24	6.5	2.13	0.297	4.16				
7.5	1.48	0.132	3.83	1.58	0.154	3.80	7.5	2.10	0.286	3.74				
8.5	1.44	0.119	3.47	1.55	0.142	3.44	8.5	2.08	0.278	3.37				
9.5	1.41	0.109	3.15	1.52	0.132	3.12	9.5	2.07	0.272	3.05				
10.5	1.38	0.101	2.87	1.49	0.124	2.85	10.5	2.06	0.268	2.78				
12.5	1.33	0.0894	2.43	1.45	0.113	2.40	12.5	2.05	0.264	2.34				
14.5	1.29	0.0806	2.08	1.42	0.104	2.06	14.5	2.05	0.263	2.00				
16.5	1.25	0.0738	1.80	1.39	0.0989	1.78	16.5	2.05	0.263	1.74				
18.5	1.23	0.0686	1.58	1.38	0.0944	1.56	18.5	2.06	0.265	1.52				
20.5	1.21	0.0644	1.40	1.36	0.0910	1.38	20.5	2.06	0.267	1.35				
22.5	1.17	0.0571	1.07	1.34	0.0955	1.05	25.5	2.08	0.273	1.03				
30.5	1.13	0.0520	0.851	1.33	0.0830	0.838	30.5	2.09	0.279	0.838				
40.5	1.09	0.0455	0.584	1.32	0.0821	0.577	40.5	2.11	0.288	0.603				
50.5	1.07	0.0428	0.434	1.33	0.0848	0.434	50.5	2.12	0.294	0.476				
60.5	1.07	0.0421	0.343	1.35	0.0892	0.349	60.5	2.13	0.297	0.404				
80.5	1.09	0.0447	0.242	1.39	0.0988	0.261	80.5	2.13	0.300	0.325				
100	1.13	0.0515	0.194	1.42	0.106	0.222	100	2.13	0.302	0.286				
150	1.29	0.0821	0.162	1.46	0.115	0.190	150	2.14	0.302	0.244				
170	1.33	0.0894	0.164				200	2.13	0.301	0.229				
$M_\infty = 23$					$M_\infty = 10$					$M_\infty = 4$				
0.913	2.15	0.472	8.85	2.28	0.500	8.85	0.913	3.10	0.682	8.68				
1.0	2.14	0.460	8.73	2.27	0.490	8.73	1.0	3.10	0.684	8.55				
1.2	2.11	0.437	8.46	2.24	0.470	8.46	1.2	3.10	0.683	8.28				
1.5	2.06	0.404	8.08	2.19	0.438	8.08	1.5	3.08	0.672	7.89				
2.5	1.91	0.312	6.98	2.05	0.348	6.97	2.5	3.01	0.617	6.78				
3.5	1.80	0.250	6.09	1.94	0.287	6.08	3.5	2.95	0.574	5.88				
4.5	1.71	0.208	5.36	1.86	0.246	5.34	4.5	2.91	0.548	5.15				
5.5	1.63	0.179	4.76	1.80	0.218	4.73	5.5	2.89	0.533	4.55				
6.5	1.58	0.157	4.24	1.75	0.197	4.22	6.5	2.87	0.525	4.05				
7.5	1.53	0.141	3.82	1.71	0.182	3.79	7.5	2.87	0.521	3.63				
8.5	1.49	0.129	3.45	1.68	0.171	3.43	8.5	2.87	0.520	3.27				
9.5	1.45	0.119	3.13	1.65	0.162	3.11	9.5	2.87	0.520	2.97				
10.5	1.43	0.111	2.86	1.63	0.155	2.84	10.5	2.87	0.521	2.70				
12.5	1.38	0.0994	2.41	1.60	0.145	2.39	12.5	2.87	0.526	2.28				
14.5	1.34	0.0908	2.07	1.58	0.138	2.04	14.5	2.88	0.531	1.95				
16.5	1.32	0.0843	1.79	1.56	0.133	1.77	16.5	2.89	0.536	1.70				
18.5	1.29	0.0793	1.57	1.55	0.130	1.55	18.5	2.90	0.540	1.50				
20.5	1.27	0.0754	1.39	1.54	0.128	1.37	20.5	2.90	0.544	1.33				
25.5	1.24	0.0686	1.06	1.54	0.126	1.04	25.5	2.91	0.551	1.04				
30.5	1.22	0.0646	0.843	1.54	0.127	0.833	30.5	2.92	0.556	0.856				
40.5	1.20	0.0602	0.579	1.56	0.133	0.579	40.5	2.93	0.561	0.635				
50.5	1.19	0.0599	0.433	1.58	0.139	0.444	50.5	2.93	0.563	0.512				
60.5	1.20	0.0617	0.344	1.60	0.145	0.366	60.5	2.93	0.564	0.441				
80.5	1.24	0.0688	0.250	1.62	0.153	0.284	80.5	2.93	0.565	0.362				
100	1.29	0.0776	0.207	1.64	0.157	0.245	100	2.93	0.564	0.321				
150	1.36	0.0948	0.176	1.65	0.162	0.210	150	2.93	0.561	0.276				
200				1.65	0.163	0.199	170	2.93	0.559	0.264				

Table 23

 $\theta_b = 5^\circ$ 

$x_b$	$i_b \cdot 10^3$	$p_b \cdot 10^3$	$\beta_b$	$C_x \cdot 10^3$	$x_b$	$i_b \cdot 10^3$	$p_b \cdot 10^3$	$\beta_b$	$C_x \cdot 10^3$
$H = 60, V_\infty = 10000$									
$H = 30, V_\infty = 7500$									
0.913	3.52	11.7	0.403	2.56 8.89	0.913	3.39	11.2	0.516	2.31 9.15
1.0	3.50	11.3	0.386	2.59 8.71	1.0	3.37	10.7	0.490	2.33 9.02
1.2	3.47	10.4	0.351	2.64 8.44	1.2	3.32	9.87	0.445	2.39 8.75
1.5	3.43	9.41	0.312	2.71 8.06	1.5	3.27	8.82	0.392	2.45 8.36
2.5	3.34	7.33	0.234	2.86 6.94	2.5	3.12	6.51	0.278	2.63 7.21
3.5	3.27	6.08	0.189	2.98 6.04	3.5	3.01	5.21	0.216	2.76 6.28
4.5	3.21	5.16	0.157	3.07 5.30	4.5	2.94	4.52	0.184	2.84 5.52
5.5	3.17	4.53	0.135	3.15 4.69	5.5	2.90	4.10	0.165	2.90 4.89
6.5	3.14	4.09	0.121	3.20 4.18	6.5	2.86	3.75	0.149	2.94 4.36
7.5	3.11	3.78	0.111	3.25 3.75	7.5	2.82	3.47	0.137	2.99 3.92
8.5	3.09	3.59	0.104	3.28 3.39	8.5	2.79	3.23	0.126	3.03 3.54
9.5	3.08	3.44	0.0999	3.30 3.07	9.5	2.76	3.03	0.117	3.06 3.21
10.5	3.07	3.30	0.0954	3.32 2.81	10.5	2.74	2.86	0.110	3.09 2.90
12.5	3.04	3.08	0.0876	3.36 2.37	12.5	2.70	2.60	0.0989	3.15 2.48
14.5	3.02	2.85	0.0809	3.40 2.02	14.5	2.67	2.41	0.0907	3.19 2.12
16.5	3.00	2.69	0.0759	3.43 1.76	16.5	2.64	2.26	0.0846	3.22 1.84
18.5	2.99	2.57	0.0719	3.45 1.54	18.5	2.62	2.15	0.0799	3.25 1.61
20.5	2.97	2.46	0.0687	3.48 1.36	20.5	2.60	2.06	0.0761	3.27 1.43
25.5	2.95	2.26	0.0625	3.52 1.04	25.5	2.56	1.89	0.0690	3.32 1.09
30.5	2.93	2.15	0.0589	3.55 0.828	30.5	2.54	1.78	0.0648	3.35 0.866
40.5	2.92	2.05	0.0560	3.58 0.570	40.5	2.52	1.70	0.0613	3.37 0.595
50.5	2.92	2.07	0.0566	3.57 0.427	50.5	2.52	1.70	0.0613	3.37 0.447
60.5	2.93	2.18	0.0593	3.55 0.342	60.5	2.53	1.75	0.0635	3.36 0.355
80.5	2.97	2.48	0.0685	3.48 0.252	80.5	2.58	1.94	0.0715	3.30 0.253
100	3.01	2.81	0.0796	3.41 0.213	100	2.62	2.17	0.0809	3.24 0.216
110	3.03	2.99	0.0851	3.38 0.203	120	2.66	2.37	0.0892	3.20 0.198
$H = 60, V_\infty = 7500$									
$H = 30, V_\infty = 6000$									
0.913	3.59	12.0	0.490	2.31 9.18	0.913	3.21	10.0	0.521	2.27 9.17
1.00	3.57	11.4	0.466	2.34 9.05	1.0	3.19	9.63	0.495	2.29 9.05
1.20	3.52	10.3	0.419	2.40 8.77	1.2	3.13	8.79	0.445	2.35 8.77
1.50	3.47	9.19	0.367	2.46 8.37	1.5	3.06	7.75	0.385	2.43 8.37
2.55	3.33	6.71	0.259	2.64 7.17	2.5	2.91	5.96	0.283	2.58 7.22
3.55	3.24	5.38	0.203	2.76 6.24	3.5	2.83	5.13	0.237	2.66 6.29
4.55	3.18	4.63	0.171	2.84 5.48	4.5	2.76	4.54	0.205	2.75 5.53
5.55	3.14	4.22	0.155	2.89 4.85	5.5	2.71	4.08	0.181	2.81 4.90
6.55	3.11	3.91	0.142	2.93 4.33	6.5	2.66	3.71	0.162	2.86 4.38
7.55	3.03	3.65	0.132	2.96 3.89	7.5	2.61	3.41	0.146	2.91 3.93
8.55	3.06	3.42	0.123	3.00 3.51	8.5	2.58	3.17	0.134	2.95 3.55
9.55	3.03	3.21	0.115	3.03 3.19	9.5	2.54	2.98	0.124	2.98 3.23
10.5	3.01	3.04	0.108	3.06 2.92	10.5	2.52	2.83	0.116	3.01 2.95
12.5	2.97	2.77	0.0976	3.10 2.46	12.5	2.48	2.60	0.105	3.07 2.49
14.5	2.95	2.57	0.0898	3.14 2.11	14.5	2.44	2.43	0.0970	3.12 2.13
16.5	2.92	2.41	0.0838	3.17 1.83	16.5	2.42	2.31	0.0907	3.17 1.84
18.5	2.90	2.30	0.0795	3.20 1.60	18.5	2.39	2.21	0.0859	3.20 1.62
20.5	2.89	2.21	0.0760	3.22 1.42	20.5	2.38	2.13	0.0821	3.24 1.43
25.5	2.86	2.04	0.0695	3.26 1.08	25.5	2.34	1.99	0.0753	3.28 1.09
30.5	2.84	1.94	0.0659	3.28 0.860	30.5	2.32	1.90	0.0714	3.30 0.869
40.5	2.83	1.87	0.0633	3.30 0.592	40.5	2.31	1.84	0.0684	3.31 0.597
50.5	2.83	1.90	0.0643	3.29 0.444	50.5	2.31	1.85	0.0692	3.31 0.448
60.5	2.85	1.98	0.0673	3.27 0.355	60.5	2.33	1.92	0.0722	3.29 0.358
80.5	2.89	2.22	0.0764	3.21 0.262	80.5	2.37	2.10	0.0810	3.25 0.263
100	2.93	2.47	0.0858	3.16 0.221	100	2.41	2.29	0.0898	3.17 0.221
110	2.95	2.57	0.0899	3.14 0.209	120	2.44	2.42	0.0965	3.12 0.201

Table 23 Continued

 $\theta_b = 5^\circ$ 

$x_b$	$i_b \cdot 10$	$\rho_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$\rho_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$
$H = 30, V_\infty = 5000$											
0.913	3.08	9.85	0.505	2.35	9.06	0.913	2.83	8.72	0.617	2.14	9.17
1.0	3.06	9.51	0.482	2.37	8.94	1.00	2.80	8.47	0.595	2.16	9.04
1.2	3.03	8.96	0.449	2.41	8.66	1.20	2.75	7.99	0.552	2.21	8.76
1.5	2.98	8.31	0.411	2.46	8.27	1.50	2.68	7.37	0.495	2.27	8.37
2.5	2.87	6.85	0.325	2.61	7.15	2.55	2.49	5.92	0.371	2.43	7.19
3.5	2.78	5.82	0.268	2.73	6.23	3.55	2.36	5.04	0.303	2.55	6.27
4.5	2.70	5.03	0.226	2.83	5.49	4.55	2.27	4.45	0.259	2.64	5.52
5.5	2.63	4.43	0.195	2.91	4.87	5.55	2.20	4.04	0.229	2.71	4.89
6.5	2.58	3.99	0.173	2.98	4.35	6.55	2.15	3.74	0.207	2.77	4.36
7.5	2.54	3.66	0.156	3.04	3.90	7.55	2.10	3.51	0.191	2.82	3.92
8.5	2.50	3.41	0.144	3.09	3.53	8.55	2.06	3.32	0.177	2.86	3.54
9.5	2.47	3.20	0.134	3.13	3.21	9.55	2.03	3.16	0.166	2.90	3.21
10.5	2.45	3.04	0.126	3.16	2.92	10.5	2.00	3.02	0.157	2.94	2.93
12.5	2.41	2.79	0.114	3.21	2.47	12.5	1.96	2.83	0.144	2.99	2.47
14.5	2.37	2.60	0.105	3.26	2.11	14.5	1.93	2.73	0.138	3.02	2.11
16.5	2.35	2.46	0.0989	3.29	1.83	16.5	1.92	2.67	0.133	3.04	1.83
18.5	2.33	2.35	0.0939	3.32	1.61	18.5	1.91	2.63	0.131	3.05	1.60
20.5	2.31	2.27	0.0901	3.34	1.42	20.5	1.90	2.62	0.130	3.05	1.41
25.5	2.29	2.12	0.0836	3.38	1.08	25.5	1.90	2.60	0.129	3.06	1.08
30.5	2.26	2.04	0.0798	3.40	0.864	30.5	1.90	2.61	0.130	3.05	0.860
40.5	2.25	1.99	0.0776	3.42	0.594	40.5	1.92	2.69	0.135	3.03	0.598
50.5	2.26	2.03	0.0794	3.40	0.447	50.5	1.95	2.80	0.142	3.00	0.458
60.5	2.28	2.12	0.0833	3.38	0.358	60.5	1.97	2.88	0.148	2.97	0.375
80.5	2.32	2.32	0.0926	3.32	0.266	80.5	1.99	3.00	0.155	2.94	0.290
100	2.35	2.49	0.1005	3.28	0.225	100	2.01	3.06	0.160	2.93	0.250
$H = 30, V_\infty = 4000$											
$H = 10, V_\infty = 5000$											
0.913	3.13	10.2	0.609	2.21	9.14	0.913	2.98	9.55	0.521	2.34	9.15
1.0	3.11	9.93	0.588	2.22	9.01	1.0	2.97	9.35	0.504	2.36	9.03
1.2	3.06	9.34	0.548	2.26	8.74	1.2	2.93	8.88	0.474	2.40	8.75
1.5	3.01	8.57	0.496	2.32	8.36	1.5	2.89	8.27	0.435	2.47	8.36
2.5	2.84	6.66	0.372	2.48	7.23	2.5	2.75	6.60	0.333	2.66	7.23
3.5	2.71	5.41	0.293	2.61	6.32	3.5	2.65	5.51	0.269	2.75	6.31
4.5	2.61	4.61	0.244	2.70	5.56	4.5	2.56	4.75	0.225	2.83	5.55
5.5	2.54	4.03	0.212	2.77	4.93	5.5	2.49	4.20	0.195	2.91	4.93
6.5	2.48	3.69	0.188	2.83	4.40	6.5	2.44	3.79	0.173	2.93	4.40
7.5	2.43	3.40	0.172	2.88	3.96	7.5	2.39	3.48	0.156	3.03	3.96
8.5	2.39	3.17	0.158	2.92	3.57	8.5	2.35	3.24	0.144	3.08	3.58
9.5	2.36	2.99	0.148	2.95	3.25	9.5	2.32	3.05	0.134	3.12	3.25
10.5	2.33	2.84	0.140	2.98	2.96	10.5	2.30	2.89	0.126	3.15	2.97
12.5	2.28	2.61	0.127	3.03	2.50	12.5	2.25	2.65	0.113	3.21	2.51
14.5	2.25	2.45	0.118	3.06	2.14	14.5	2.22	2.47	0.105	3.25	2.15
16.5	2.22	2.32	0.111	3.09	1.86	16.5	2.19	2.34	0.0984	3.28	1.87
18.5	2.19	2.21	0.105	3.12	1.62	18.5	2.17	2.23	0.0933	3.31	1.64
20.5	2.17	2.13	0.100	3.14	1.44	20.5	2.15	2.15	0.0894	3.34	1.45
25.5	2.14	2.02	0.0950	3.17	1.09	25.5	2.12	2.01	0.0827	3.38	1.11
30.5	2.13	1.99	0.0929	3.18	0.870	30.5	2.10	1.93	0.0786	3.40	0.886
40.5	2.14	2.01	0.0941	3.17	0.598	40.5	2.08	1.87	0.0761	3.42	0.614
50.5	2.16	2.08	0.0982	3.15	0.451	50.5	2.09	1.91	0.0776	3.41	0.464
60.5	2.18	2.17	0.103	3.13	0.364	60.5	2.11	1.98	0.0812	3.39	0.374
80.5	2.22	2.35	0.112	3.09	0.274	80.5	2.15	2.17	0.0903	3.33	0.281
100	2.25	2.47	0.119	3.06	0.233	100	2.19	2.33	0.0983	3.29	0.238
						110	2.20	2.40	0.1016	3.27	0.226

Table 23 Concluded

$\theta_b = 5^\circ$	$x_b$	$i_b \cdot 10$	$\rho_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$\rho_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$	
$H = 10, V_\infty = 3000$											$H = 30, V_\infty = 5000, R = 0$		
0.913	2.72	8.60	0.586	2.20	9.11		0.227	3.17	11.2	0.591	2.25	14.6	
1.0	2.71	8.38	0.568	2.21	8.97	0.3	3.19	11.6	0.618	2.23	14.3		
1.2	2.66	7.95	0.530	2.25	8.69	0.4	3.17	11.3	0.596	2.25	13.9		
1.5	2.60	7.40	0.484	2.31	8.31	0.5	3.13	10.6	0.554	2.29	13.6		
2.5	2.43	6.02	0.372	2.47	7.18	0.6	3.09	10.0	0.514	2.33	13.3		
3.5	2.31	5.13	0.303	2.59	6.26	0.7	3.06	9.47	0.480	2.37	13.0		
4.5	2.22	4.53	0.258	2.69	5.51	0.8	3.03	9.08	0.456	2.40	12.6		
5.5	2.15	4.11	0.228	2.76	4.88	0.9	3.02	8.81	0.440	2.42	12.4		
6.5	2.09	3.80	0.205	2.82	4.35	1.0	3.00	8.59	0.427	2.44	12.1		
7.5	2.05	3.56	0.189	2.87	3.91	1.1	2.99	8.39	0.415	2.46	11.8		
8.5	2.01	3.38	0.176	2.92	3.53	1.2	2.98	8.32	0.411	2.46	11.5		
9.5	1.98	3.23	0.167	2.95	3.21	1.3	2.97	8.16	0.401	2.48	11.3		
10.5	1.96	3.12	0.159	2.98	2.93	1.4	2.96	8.02	0.393	2.49	11.0		
12.5	1.92	2.95	0.148	3.02	2.46	1.5	2.95	7.89	0.386	2.51	10.8		
14.5	1.89	2.83	0.140	3.06	2.11	2.5	2.84	6.49	0.305	2.65	8.79		
16.5	1.83	2.75	0.135	3.08	1.83	3.5	2.72	5.23	0.237	2.80	7.29		
18.5	1.86	2.69	0.131	3.10	1.60	4.5	2.63	4.35	0.191	2.93	6.14		
20.5	1.85	2.66	0.129	3.11	1.41	5.5	2.56	3.80	0.163	3.01	5.24		
25.5	1.84	2.62	0.127	3.12	1.08	6.5	2.51	3.48	0.147	3.07	4.53		
30.5	1.85	2.62	0.127	3.12	0.858	7.5	2.48	3.24	0.136	3.12	3.96		
40.5	1.86	2.70	0.132	3.10	0.596	8.5	2.45	3.05	0.126	3.16	3.49		
50.5	1.89	2.80	0.138	3.07	0.455	9.5	2.42	2.89	0.119	3.19	3.10		
60.5	1.91	2.89	0.144	3.04	0.373	10.5	2.40	2.75	0.112	3.22	2.78		
80.5	1.94	3.02	0.152	3.01	0.288	11.5	2.38	2.63	0.106	3.25	2.51		
100	1.95	3.08	0.157	2.99	0.249	12.5	2.36	2.53	0.102	3.27	2.27		
150	1.96	3.15	0.161	2.97	0.212	13.5	2.35	2.44	0.0981	3.29	2.07		
							14.5	2.33	2.37	0.0949	3.31	1.89	
							15.5	2.32	2.31	0.0923	3.33	1.74	
							16.5	2.31	2.26	0.0897	3.34	1.61	
							17.5	2.30	2.21	0.0873	3.36	1.49	
							18.5	2.29	2.16	0.0854	3.37	1.38	
							19.5	2.28	2.13	0.0837	3.38	1.29	
							20.5	2.28	2.09	0.0823	3.39	1.20	
							21.5	2.27	2.07	0.0811	3.39	1.13	
							22.5	2.26	2.04	0.0800	3.40	1.06	
							23.5	2.26	2.02	0.0791	3.41	1.00	
							24.5	2.26	2.00	0.0783	3.41	0.945	
							25.5	2.25	1.99	0.0776	3.42	0.895	
							26.5	2.25	1.98	0.0770	3.42	0.848	
							27.5	2.25	1.97	0.0765	3.42	0.805	
							28.5	2.25	1.96	0.0762	3.43	0.766	
							29.5	2.24	1.95	0.0760	3.43	0.730	
							30.5	2.24	1.95	0.0758	3.43	0.697	
							35.5	2.25	1.96	0.0761	3.43	0.564	
							40.5	2.25	1.99	0.0776	3.42	0.472	
							45.5	2.26	2.04	0.0799	3.40	0.405	
							50.5	2.28	2.10	0.0828	3.38	0.356	

Table 24

 $\theta_b = 10^\circ, Y = 1.4$ 

$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$C_x \cdot 10$	$i_b \cdot 10$	$p_b \cdot 10$	$C_x \cdot 10$	$i_b \cdot 10$	$p_b \cdot 10$	$C_x \cdot 10$
$M_\infty = \infty$				$M_\infty = 15$				$M_\infty = 6$	
0.826	2.35	0.661	9.06	2.42	0.677	9.02	2.80	0.786	8.99
1.0	2.32	0.628	8.59	2.39	0.648	8.56	2.78	0.763	8.52
1.2	2.28	0.590	8.11	2.35	0.613	8.07	2.76	0.738	8.04
1.5	2.22	0.538	7.45	2.30	0.564	7.42	2.71	0.697	7.38
2.0	2.13	0.465	6.54	2.21	0.494	6.51	2.64	0.634	6.47
2.5	2.05	0.409	5.79	2.14	0.436	5.76	2.58	0.585	5.72
3.0	1.98	0.365	5.16	2.07	0.395	5.14	2.53	0.547	5.09
3.5	1.93	0.330	4.63	2.02	0.362	4.62	2.49	0.519	4.57
4.0	1.88	0.305	4.20	1.98	0.335	4.18	2.46	0.499	4.15
4.5	1.84	0.283	3.82	1.94	0.315	3.81	2.44	0.482	3.77
5	1.81	0.265	3.49	1.91	0.298	3.48	2.43	0.471	3.45
6	1.76	0.239	2.96	1.87	0.274	2.95	2.40	0.457	2.93
7	1.72	0.221	2.55	1.83	0.257	2.55	2.39	0.450	2.54
8	1.69	0.209	2.23	1.81	0.246	2.23	2.39	0.449	2.24
9	1.67	0.201	1.98	1.80	0.239	1.97	2.39	0.449	1.98
10	1.66	0.195	1.77	1.79	0.235	1.77	2.40	0.453	1.80
12	1.64	0.189	1.45	1.78	0.232	1.46	2.41	0.463	1.51
14	1.64	0.188	1.24	1.79	0.234	1.25	2.43	0.475	1.32
16	1.64	0.188	1.08	1.80	0.240	1.09	2.45	0.486	1.18
18	1.65	0.192	0.964	1.81	0.247	0.981	2.46	0.497	1.07
20	1.67	0.200	0.876	1.84	0.257	0.899	2.48	0.507	1.00
25	1.74	0.231	0.738	1.90	0.288	0.771	2.50	0.525	0.892
30	1.83	0.274	0.676	1.95	0.320	0.711	2.52	0.535	0.832
40	1.94	0.340	0.657	2.02	0.361	0.678	2.53	0.547	0.774
50	$M_\infty = 23$				$M_\infty = 10$				$M_\infty = 4$
0.826	2.38	0.667	9.03	2.51	0.701	9.00	3.38	0.926	8.87
1.0	2.35	0.636	8.57	2.48	0.676	8.57	3.38	0.926	8.40
1.2	2.31	0.601	8.08	2.45	0.643	8.08	3.37	0.918	7.91
1.5	2.25	0.550	7.43	2.39	0.595	7.43	3.35	0.896	7.25
2.0	2.16	0.478	6.52	2.31	0.526	6.51	3.30	0.853	6.35
2.5	2.09	0.422	5.77	2.24	0.472	5.76	3.26	0.817	5.61
3.0	2.02	0.378	5.14	2.18	0.429	5.13	3.23	0.790	5.00
3.5	1.97	0.344	4.62	2.13	0.397	4.62	3.21	0.771	4.49
4.0	1.92	0.318	4.19	2.09	0.372	4.18	3.19	0.759	4.07
4.5	1.89	0.297	3.81	2.06	0.352	3.79	3.18	0.751	3.70
5	1.85	0.279	3.47	2.04	0.337	3.48	3.18	0.747	3.40
6	1.81	0.254	2.95	2.00	0.315	2.95	3.18	0.744	2.90
7	1.77	0.236	2.54	1.97	0.301	2.55	3.18	0.747	2.53
8	1.74	0.224	2.22	1.96	0.293	2.23	3.18	0.752	2.24
9	1.73	0.217	1.97	1.95	0.288	1.98	3.19	0.758	2.02
10	1.71	0.212	1.77	1.94	0.286	1.77	3.20	0.765	1.82
12	1.70	0.207	1.45	1.95	0.287	1.47	3.22	0.778	1.57
14	1.70	0.207	1.24	1.96	0.294	1.27	3.23	0.789	1.39
16	1.71	0.210	1.08	1.97	0.303	1.11	3.24	0.798	1.26
18	1.72	0.216	0.972	1.99	0.313	1.01	3.25	0.805	1.17
20	1.74	0.224	0.884	2.01	0.325	0.930	3.25	0.811	1.10
25	1.81	0.255	0.752	2.06	0.353	0.808	3.26	0.819	0.988
30	1.88	0.293	0.690	2.10	0.376	0.750	3.26	0.817	0.937
40	1.97	0.346	0.664	2.14	0.402	0.706	3.27	0.824	0.849
50				2.15	0.407	0.694			

Table 25

 $\theta_b = 10^\circ$ 

$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$
$H = 60, V_\infty = 10\ 000$						$H = 30, V_\infty = 7500$					
0.826	3.63	15.6	0.564	2.36	9.02	0.826	3.53	14.7	0.704	2.13	9.33
1.0	3.60	14.4	0.513	2.42	8.54	1.0	3.49	13.5	0.637	2.19	8.86
1.2	3.57	13.3	0.468	2.47	8.05	1.2	3.44	12.4	0.577	2.24	8.35
1.5	3.53	12.1	0.416	2.54	7.37	1.5	3.38	11.0	0.508	2.31	7.67
2.0	3.48	10.6	0.360	2.63	6.43	2.0	3.30	9.43	0.423	2.41	6.71
2.5	3.44	9.64	0.320	2.69	5.67	2.5	3.23	8.27	0.365	2.49	5.92
3.0	3.41	8.85	0.290	2.75	5.03	3.0	3.18	7.47	0.325	2.55	5.26
3.5	3.38	8.19	0.266	2.79	4.50	3.5	3.15	7.00	0.302	2.59	4.72
4.0	3.35	7.65	0.246	2.84	4.06	4.0	3.13	6.68	0.286	2.62	4.26
4.5	3.34	7.27	0.232	2.87	3.58	4.5	3.11	6.43	0.274	2.64	3.87
5	3.32	7.01	0.222	2.89	3.37	5	3.09	6.19	0.263	2.56	3.53
6	3.31	6.72	0.212	2.92	2.83	6	3.06	5.84	0.246	2.70	2.99
7	3.30	6.64	0.209	2.92	2.44	7	3.04	5.58	0.234	2.72	2.58
8	3.30	6.60	0.208	2.93	2.14	8	3.03	5.42	0.226	2.74	2.26
9	3.30	6.60	0.208	2.93	1.89	9	3.02	5.31	0.221	2.75	2.00
10	3.30	6.63	0.209	2.93	1.69	10	3.01	5.25	0.218	2.76	1.79
12	3.31	6.75	0.213	2.92	1.40	12	3.01	5.21	0.216	2.76	1.48
14	3.32	7.00	0.222	2.89	1.20	14	3.02	5.27	0.219	2.75	1.26
16	3.34	7.39	0.236	2.86	1.06	16	3.03	5.45	0.227	2.74	1.11
18	3.37	7.89	0.255	2.82	0.969	18	3.05	5.69	0.239	2.71	0.998
20	3.39	8.48	0.277	2.77	0.899	20	3.08	5.99	0.253	2.68	0.916
25	3.45	9.75	0.325	2.68	0.805	25	3.14	6.83	0.293	2.60	0.795
30	3.47	10.28	0.345	2.65	0.767	30	3.19	7.55	0.329	2.55	0.743
40	3.44	9.74	0.324	2.68	0.724	40	3.21	7.86	0.344	2.52	0.711
$H = 60, V_\infty = 7500$						$H = 30, V_\infty = 6000$					
0.826	3.72	15.8	0.673	2.14	9.36	0.826	3.38	13.2	0.718	2.09	9.36
1.00	3.68	14.4	0.604	2.20	8.87	1.0	3.32	12.0	0.644	2.15	8.88
1.20	3.63	13.1	0.545	2.26	3.36	1.2	3.27	10.9	0.577	2.21	8.37
1.50	3.58	11.7	0.480	2.32	7.68	1.5	3.19	9.74	0.502	2.29	7.69
2.05	3.50	9.84	0.396	2.42	6.61	2.0	3.11	8.44	0.425	2.38	6.71
2.55	3.44	8.67	0.344	2.50	5.84	2.5	3.06	7.77	0.386	2.43	5.93
3.05	3.40	7.83	0.307	2.55	5.20	3.0	3.02	7.26	0.357	2.47	5.28
3.55	3.37	7.32	0.285	2.59	4.66	3.5	2.99	6.85	0.333	2.50	4.74
4.05	3.35	7.03	0.272	2.61	4.20	4.0	2.96	6.49	0.313	2.53	4.28
4.55	3.34	6.81	0.263	2.63	3.82	4.5	2.93	6.19	0.296	2.56	3.88
5.05	3.33	6.62	0.235	2.65	3.48	5	2.91	5.93	0.282	2.59	3.56
6.05	3.31	6.32	0.242	2.67	2.96	6	2.87	5.52	0.259	2.63	3.02
7.05	3.29	6.12	0.233	2.69	2.55	7	2.84	5.26	0.244	2.66	2.60
8.05	3.28	5.97	0.227	2.70	2.23	8	2.83	5.10	0.236	2.68	2.28
9.05	3.28	5.89	0.224	2.71	1.98	9	2.82	5.00	0.230	2.69	2.02
10	3.28	5.84	0.222	2.71	1.77	10	2.81	4.94	0.227	2.70	1.81
12	3.28	5.86	0.223	2.71	1.47	12	2.80	4.91	0.225	2.70	1.49
14	3.29	6.00	0.229	2.70	1.26	14	2.81	4.96	0.228	2.70	1.27
16	3.31	6.27	0.240	2.68	1.11	16	2.82	5.09	0.235	2.68	1.12
18	3.33	6.61	0.254	2.65	1.00	18	2.84	5.27	0.245	2.66	1.00
20	3.35	6.99	0.271	2.62	0.924	20	2.87	5.49	0.257	2.63	0.923
25	3.41	7.95	0.312	2.55	0.812	25	2.93	6.14	0.293	2.57	0.797
30	3.44	8.60	0.340	2.50	0.764	30	2.98	6.75	0.327	2.51	0.741
40	3.44	8.58	0.340	2.50	0.724	40	3.02	7.17	0.352	2.47	0.706

Table 25 Continued

$\theta_b$	$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$
$H = 30, V_\infty = 5000$												
0.826	3.24	12.7	0.688	2.16	9.25		0.826	3.05	11.2	0.839	1.96	9.35
1.0	3.21	11.9	0.639	2.21	8.77		1.00	3.00	10.5	0.777	2.01	8.87
1.2	3.17	11.2	0.594	2.25	8.27		1.20	2.94	9.90	0.718	2.05	8.38
1.5	3.12	10.4	0.543	2.30	7.60		1.50	2.86	9.04	0.646	2.11	7.71
2.0	3.06	9.48	0.480	2.37	6.65		2.05	2.75	7.98	0.551	2.21	6.68
2.5	3.01	8.70	0.433	2.43	5.89		2.55	2.67	7.32	0.490	2.27	5.92
3.0	2.96	8.04	0.395	2.49	5.25		3.05	2.61	6.80	0.445	2.33	5.28
3.5	2.92	7.49	0.362	2.55	4.72		3.55	2.55	6.39	0.410	2.38	4.75
4.0	2.88	7.02	0.335	2.60	4.26		4.05	2.51	6.07	0.384	2.41	4.29
4.5	2.85	6.63	0.313	2.64	3.88		4.55	2.48	5.81	0.363	2.45	3.90
5	2.83	6.34	0.297	2.67	3.55		5.05	2.45	5.62	0.348	2.47	3.59
6	2.79	5.91	0.273	2.72	3.01		6.05	2.41	5.32	0.324	2.51	3.05
7	2.76	5.64	0.259	2.75	2.60		7.05	2.38	5.13	0.309	2.54	2.63
8	2.74	5.46	0.249	2.77	2.28		8.05	2.36	5.00	0.300	2.56	2.30
9	2.73	5.35	0.243	2.79	2.02		9.05	2.34	4.90	0.292	2.57	2.04
10	2.73	5.28	0.239	2.80	1.81		10	2.34	4.86	0.289	2.58	1.84
12	2.72	5.24	0.237	2.80	1.49		12	2.34	4.85	0.288	2.58	1.51
14	2.73	5.27	0.239	2.80	1.28		14	2.35	4.93	0.295	2.57	1.30
16	2.74	5.37	0.244	2.78	1.12		16	2.37	5.05	0.304	2.55	1.14
18	2.75	5.53	0.253	2.76	1.01		18	2.39	5.20	0.315	2.53	1.03
20	2.77	5.74	0.264	2.74	0.927		20	2.41	5.36	0.327	2.51	0.950
25	2.83	6.34	0.297	2.67	0.798		22	2.43	5.51	0.339	2.49	0.888
30	2.87	6.91	0.329	2.61	0.739		25	2.46	5.71	0.355	2.46	0.824
45	2.91	7.42	0.358	2.55	0.694		30	2.50	5.99	0.377	2.42	0.761
$H = 30, V_\infty = 4000$												
0.826	3.30	13.6	0.816	2.03	9.32		0.826	3.16	12.4	0.713	2.13	9.34
1.0	3.26	12.4	0.759	2.07	8.86		1.0	3.12	11.7	0.665	2.18	8.86
1.2	3.21	11.6	0.704	2.12	8.36		1.2	3.08	11.1	0.623	2.22	8.36
1.5	3.15	10.6	0.635	2.18	7.70		1.5	3.03	10.3	0.568	2.28	7.63
2.0	3.06	9.31	0.546	2.27	6.77		2.0	2.96	9.18	0.493	2.33	6.74
2.5	2.98	8.28	0.477	2.34	5.99		2.5	2.89	8.33	0.439	2.46	5.96
3.0	2.92	7.50	0.426	2.41	5.34		3.0	2.84	7.64	0.396	2.54	5.33
3.5	2.87	6.92	0.388	2.45	4.80		3.5	2.79	7.03	0.362	2.61	4.79
4.0	2.82	6.49	0.360	2.50	4.34		4.0	2.75	6.64	0.335	2.66	4.33
4.5	2.79	6.15	0.339	2.53	3.96		4.5	2.72	6.28	0.314	2.69	3.93
5	2.76	5.88	0.321	2.56	3.61		5	2.70	6.01	0.298	2.71	3.60
6	2.72	5.47	0.296	2.60	3.07		6	2.65	5.59	0.273	2.74	3.06
7	2.69	5.19	0.279	2.63	2.6		7	2.62	5.32	0.258	2.77	2.64
8	2.66	5.01	0.268	2.65	2.31		8	2.61	5.15	0.248	2.79	2.31
9	2.65	4.89	0.261	2.57	2.06		9	2.59	5.03	0.241	2.80	2.05
10	2.64	4.82	0.256	2.68	1.85		10	2.58	4.96	0.237	2.81	1.84
12	2.63	4.77	0.253	2.68	1.52		12	2.58	4.91	0.234	2.81	1.52
14	2.63	4.78	0.254	2.68	1.30		14	2.58	4.92	0.235	2.81	1.30
16	2.64	4.85	0.258	2.67	1.14		16	2.59	5.00	0.239	2.80	1.14
18	2.66	4.98	0.266	2.56	1.02		18	2.61	5.14	0.247	2.79	1.02
20	2.68	5.14	0.276	2.64	0.939		20	2.62	5.33	0.258	2.77	0.942
25	2.73	5.62	0.305	2.58	0.803		25	2.68	5.88	0.290	2.72	0.609
30	2.78	6.07	0.334	2.54	0.738		30	2.73	6.43	0.322	2.68	0.747
45	2.85	6.70	0.374	2.48	0.688		45	2.79	7.02	0.358	2.62	0.704
$H = 10, V_\infty = 5000$												
0.826	3.30	13.6	0.816	2.03	9.32		0.826	3.16	12.4	0.713	2.13	9.34
1.0	3.26	12.4	0.759	2.07	8.86		1.0	3.12	11.7	0.665	2.18	8.86
1.2	3.21	11.6	0.704	2.12	8.36		1.2	3.08	11.1	0.623	2.22	8.36
1.5	3.15	10.6	0.635	2.18	7.70		1.5	3.03	10.3	0.568	2.28	7.63
2.0	3.06	9.31	0.546	2.27	6.77		2.0	2.96	9.18	0.493	2.33	6.74
2.5	2.98	8.28	0.477	2.34	5.99		2.5	2.89	8.33	0.439	2.46	5.96
3.0	2.92	7.50	0.426	2.41	5.34		3.0	2.84	7.64	0.396	2.54	5.33
3.5	2.87	6.92	0.388	2.45	4.80		3.5	2.79	7.03	0.362	2.61	4.79
4.0	2.82	6.49	0.360	2.50	4.34		4.0	2.75	6.64	0.335	2.66	4.33
4.5	2.79	6.15	0.339	2.53	3.96		4.5	2.72	6.28	0.314	2.69	3.93
5	2.76	5.88	0.321	2.56	3.61		5	2.70	6.01	0.298	2.71	3.60
6	2.72	5.47	0.296	2.60	3.07		6	2.65	5.59	0.273	2.74	3.06
7	2.69	5.19	0.279	2.63	2.6		7	2.62	5.32	0.258	2.77	2.64
8	2.66	5.01	0.268	2.65	2.31		8	2.61	5.15	0.248	2.79	2.31
9	2.65	4.89	0.261	2.57	2.06		9	2.59	5.03	0.241	2.80	2.05
10	2.64	4.82	0.256	2.68	1.85		10	2.58	4.96	0.237	2.81	1.84
12	2.63	4.77	0.253	2.68	1.52		12	2.58	4.91	0.234	2.81	1.52
14	2.63	4.78	0.254	2.68	1.30		14	2.58	4.92	0.235	2.81	1.30
16	2.64	4.85	0.258	2.67	1.14		16	2.59	5.00	0.239	2.80	1.14
18	2.66	4.98	0.266	2.56	1.02		18	2.61	5.14	0.247	2.79	1.02
20	2.68	5.14	0.276	2.64	0.939		20	2.62	5.33	0.258	2.77	0.942
25	2.73	5.62	0.305	2.58	0.803		25	2.68	5.88	0.290	2.72	0.609
30	2.78	6.07	0.334	2.54	0.738		30	2.73	6.43	0.322	2.68	0.747
45	2.85	6.70	0.374	2.48	0.688		45	2.79	7.02	0.358	2.62	0.704

Table 25 Continued

$\theta_b = 10^\circ$	$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$p_b \cdot 10$	$p_b$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$p_b \cdot 10$	$p_b$	$C_x \cdot 10$
$H = 10, V_\infty = 3000$												
0.826	2.95	11.0	0.802	2.00	9.28		8.5	3.00	5.09	0.211	2.77	1.82
1.0	2.90	10.4	0.749	2.04	8.81		9.0	3.00	5.07	0.210	2.78	1.71
1.2	2.85	9.89	0.698	2.09	8.31		9.5	3.00	5.07	0.210	2.78	1.61
1.5	2.79	9.19	0.636	2.14	7.65		10	3.00	5.06	0.209	2.78	1.52
2.5	2.61	7.49	0.491	2.30	5.94		11	3.00	5.07	0.210	2.78	1.36
3.5	2.49	6.49	0.409	2.41	4.76		12	3.00	5.14	0.213	2.77	1.24
4.5	2.42	5.91	0.363	2.48	3.92		13	3.01	5.25	0.218	2.76	1.14
5.5	2.37	5.53	0.333	2.53	3.30		14	3.02	5.38	0.224	2.74	1.06
6.5	2.33	5.28	0.314	2.57	2.83		15	3.04	5.55	0.232	2.73	0.93
7.5	2.31	5.12	0.302	2.59	2.46		16	3.05	5.73	0.241	2.71	0.94
8.5	2.30	5.03	0.295	2.61	2.16		17	3.07	5.92	0.250	2.69	0.89
9.5	2.29	4.97	0.291	2.61	1.93		18	3.09	6.13	0.260	2.67	0.85
10.5	2.28	4.95	0.289	2.62	1.74		19	3.10	6.34	0.270	2.65	0.82
12.5	2.29	4.97	0.290	2.61	1.45		20	3.12	6.56	0.280	2.63	0.80
14.5	2.30	5.05	0.297	2.60	1.25		21	3.13	6.77	0.291	2.61	0.78
16.5	2.32	5.16	0.305	2.59	1.11		22	3.15	6.99	0.301	2.59	0.75
18.5	2.33	5.29	0.315	2.57	1.01		23	3.16	7.19	0.311	2.57	0.75
20.5	2.36	5.44	0.326	2.55	0.933		24	3.18	7.38	0.320	2.56	0.74
25.5	2.40	5.79	0.353	2.50	0.813		25	3.19	7.54	0.328	2.55	0.73
30.5	2.44	6.07	0.376	2.46	0.754		26	3.20	7.68	0.335	2.54	0.72
35.5	2.47	6.27	0.391	2.44	0.724		27	3.20	7.80	0.341	2.53	0.72
$H = 30, V_\infty = 7500, \bar{R} = 0$												
0.215	3.63	17.6	0.860	2.01	15.0		35	3.20	7.81	0.342	2.53	0.70
0.3	3.66	18.8	0.915	1.98	14.4		40	3.19	7.59	0.331	2.54	0.69
0.4	3.61	17.0	0.830	2.03	13.7		45	3.18	7.47	0.325	2.55	0.67
0.5	3.56	15.3	0.737	2.10	13.0							
0.6	3.51	14.0	0.665	2.16	12.4							
0.7	3.47	13.0	0.614	2.21	11.9							
0.8	3.44	12.3	0.576	2.24	11.4							
0.9	3.41	11.6	0.540	2.28	10.9							
1.0	3.41	11.5	0.535	2.28	10.4							
1.1	3.40	11.4	0.530	2.29	10.0							
1.2	3.39	11.2	0.518	2.30	9.66							
1.3	3.38	10.9	0.503	2.32	9.31							
1.4	3.36	10.6	0.483	2.34	8.94							
1.5	3.34	10.3	0.468	2.36	8.60							
2.0	3.25	8.63	0.383	2.47	7.21							
2.5	3.18	7.49	0.326	2.55	6.13							
3.0	3.14	6.86	0.295	2.60	5.28							
3.5	3.11	6.49	0.277	2.63	4.61							
4.0	3.09	6.22	0.264	2.66	4.07							
4.5	3.08	5.99	0.250	2.68	3.62							
5.0	3.03	5.78	0.243	2.70	3.26							
5.5	3.04	5.60	0.235	2.72	2.94							
6.0	3.03	5.47	0.228	2.73	2.68							
6.5	3.02	5.35	0.223	2.75	2.46							
7.0	3.01	5.25	0.218	2.76	2.26							
7.5	3.01	5.18	0.215	2.76	2.10							
8.0	3.00	5.13	0.212	2.77	1.95							
$H = 30, V_\infty = 7500, \bar{R} = 0.2$												
0.215	3.63	17.6	0.860	2.01	15.0		35	3.20	7.81	0.342	2.53	0.70
0.3	3.66	18.8	0.915	1.98	14.4		40	3.19	7.59	0.331	2.54	0.69
0.4	3.61	17.0	0.830	2.03	13.7		45	3.18	7.47	0.325	2.55	0.67
0.5	3.56	15.3	0.737	2.10	13.0							
0.6	3.51	14.0	0.665	2.16	12.4							
0.7	3.47	13.0	0.614	2.21	11.9							
0.8	3.44	12.3	0.576	2.24	11.4							
0.9	3.41	11.6	0.540	2.28	10.9							
1.0	3.41	11.5	0.535	2.28	10.4							
1.1	3.40	11.4	0.530	2.29	10.0							
1.2	3.39	11.2	0.518	2.30	9.66							
1.3	3.38	10.9	0.503	2.32	9.31							
1.4	3.36	10.6	0.483	2.34	8.94							
1.5	3.34	10.3	0.468	2.36	8.60							
2.0	3.25	8.63	0.383	2.47	7.21							
2.5	3.18	7.49	0.326	2.55	6.13							
3.0	3.14	6.86	0.295	2.60	5.28							
3.5	3.11	6.49	0.277	2.63	4.61							
4.0	3.09	6.22	0.264	2.66	4.07							
4.5	3.08	5.99	0.250	2.68	3.62							
5.0	3.03	5.78	0.243	2.70	3.26							
5.5	3.04	5.60	0.235	2.72	2.94							
6.0	3.03	5.47	0.228	2.73	2.68							
6.5	3.02	5.35	0.223	2.75	2.46							
7.0	3.01	5.25	0.218	2.76	2.26							
7.5	3.01	5.18	0.215	2.76	2.10							
8.0	3.00	5.13	0.212	2.77	1.95							

Table 25 Continued

 $\theta_b = 10^\circ$ 

$x_b$	$i_b \cdot 10$	$\rho_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$\rho_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$
$H = 30, V_\infty = 7500, \bar{R} = 0.2$						$H = 30, V_\infty = 7500, \bar{R} = 0.5$					
6.0	3.04	5.52	0.231	2.73	2.75	0.521	3.56	15.4	0.747	2.10	11.3
6.5	3.03	5.42	0.226	2.74	2.54	0.6	3.54	14.9	0.713	2.12	11.0
7.0	3.02	5.32	0.221	2.75	2.33	0.7	3.51	14.2	0.675	2.15	10.6
7.5	3.01	5.24	0.218	2.76	2.17	0.8	3.49	13.6	0.644	2.18	10.2
8.0	3.01	5.18	0.215	2.76	2.02	0.9	3.47	13.1	0.616	2.21	9.86
8.5	3.00	5.14	0.213	2.77	1.88	1.0	3.45	12.6	0.591	2.23	9.52
9.0	3.00	5.11	0.211	2.77	1.77	1.1	3.43	12.2	0.568	2.25	9.19
9.5	3.00	5.09	0.211	2.77	1.66	1.2	3.42	11.8	0.546	2.27	8.88
10	3.00	5.08	0.210	2.78	1.57	1.3	3.40	11.4	0.525	2.29	8.60
11	3.00	5.07	0.210	2.78	1.42	1.4	3.38	11.0	0.505	2.32	8.32
12	3.00	5.11	0.212	2.77	1.29	1.5	3.36	10.6	0.484	2.34	8.05
13	3.01	5.20	0.216	2.76	1.18	2.0	3.28	9.07	0.405	2.44	6.92
14	3.02	5.31	0.221	2.75	1.10	2.5	3.21	7.91	0.347	2.52	6.00
15	3.03	5.45	0.227	2.74	1.03	3.0	3.16	7.19	0.311	2.57	5.27
16	3.04	5.61	0.235	2.72	0.973	3.5	3.13	6.74	0.289	2.61	4.66
17	3.06	5.79	0.244	2.70	0.924	4.0	3.11	6.47	0.276	2.64	4.16
18	3.07	5.98	0.253	2.68	0.883	4.5	3.09	6.22	0.264	2.66	3.76
19	3.09	6.18	0.262	2.66	0.849	5.0	3.08	5.99	0.253	2.68	3.41
20	3.11	6.39	0.272	2.64	0.821	5.5	3.06	5.80	0.244	2.70	3.10
21	3.12	6.60	0.282	2.62	0.798	6.0	3.05	5.65	0.237	2.71	2.85
22	3.14	6.81	0.293	2.61	0.779	6.5	3.04	5.52	0.231	2.73	2.62
23	3.15	7.02	0.303	2.59	0.763	7.0	3.03	5.42	0.226	2.74	2.43
24	3.17	7.21	0.312	2.57	0.751	7.5	3.02	5.34	0.222	2.75	2.25
25	3.18	7.39	0.321	2.56	0.742	8.0	3.02	5.29	0.220	2.75	2.11
26	3.19	7.55	0.329	2.55	0.734	8.5	3.01	5.24	0.217	2.76	1.97
27	3.20	7.70	0.336	2.54	0.728	9.0	3.01	5.20	0.216	2.76	1.86
28	3.20	7.81	0.342	2.53	0.723	9.5	3.01	5.17	0.214	2.77	1.75
29	3.21	7.90	0.346	2.52	0.720	10	3.00	5.14	0.213	2.77	1.65
30	3.21	7.97	0.350	2.51	0.717	11	3.00	5.12	0.212	2.77	1.49
31	3.22	8.01	0.351	2.51	0.715	12	3.00	5.14	0.213	2.77	1.36
32	3.22	8.01	0.352	2.51	0.713	13	3.01	5.20	0.216	2.76	1.25
33	3.22	7.99	0.351	2.51	0.711	14	3.02	5.28	0.220	2.75	1.16
34	3.21	7.96	0.349	2.52	0.709	15	3.03	5.39	0.225	2.74	1.08
35	3.21	7.92	0.347	2.52	0.707	16	3.04	5.53	0.231	2.73	1.02
36	3.21	7.87	0.345	2.52	0.705	17	3.05	5.68	0.238	2.71	0.970
37	3.21	7.82	0.342	2.53	0.703	18	3.06	5.85	0.246	2.70	0.925
38	3.20	7.77	0.340	2.53	0.701	19	3.08	6.02	0.255	2.68	0.887
39	3.20	7.73	0.338	2.53	0.699	20	3.09	6.20	0.263	2.66	0.855
40	3.20	7.68	0.335	2.54	0.697	21	3.11	6.39	0.273	2.64	0.828
41	3.19	7.64	0.333	2.54	0.695	22	3.12	6.59	0.282	2.63	0.805
42	3.19	7.60	0.332	2.54	0.692	23	3.14	6.78	0.291	2.61	0.787

Table 25 Concluded

 $\theta_b = 10^\circ$ 

$x_b$	$i_b \cdot 10$	$a_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$a_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$
$H = 30, V_\infty = 7500, \bar{R} = 0.5$										$H = 30, V_\infty = 5000, \bar{R} = 0$	
24	3.15	6.97	0.301	2.59	0.772	4.0	2.81	6.17	0.288	2.69	4.10
25	3.16	7.15	0.309	2.58	0.759	4.5	2.79	5.92	0.274	2.72	3.66
26	3.17	7.32	0.317	2.56	0.749	5.0	2.77	5.74	0.264	2.74	3.30
27	3.18	7.47	0.325	2.55	0.740	5.5	2.76	5.60	0.257	2.76	2.99
28	3.19	7.61	0.332	2.54	0.734	6.0	2.75	5.48	0.250	2.77	2.72
29	3.20	7.72	0.337	2.53	0.729	6.5	2.74	5.38	0.244	2.78	2.49
30	3.21	7.82	0.342	2.53	0.724	7.0	2.73	5.29	0.240	2.80	2.30
31	3.21	7.89	0.346	2.52	0.721	7.5	2.72	5.24	0.237	2.80	2.13
32	3.21	7.94	0.348	2.52	0.718	8.0	2.72	5.20	0.235	2.81	1.98
33	3.21	7.96	0.349	2.52	0.716	8.5	2.71	5.15	0.232	2.81	1.85
34	3.21	7.95	0.349	2.52	0.714	9.0	2.71	5.12	0.231	2.82	1.74
35	3.21	7.94	0.348	2.52	0.712	9.5	2.71	5.11	0.230	2.82	1.64
36	3.21	7.92	0.347	2.52	0.710	10	2.71	5.10	0.230	2.82	1.55
37	3.21	7.89	0.346	2.52	0.708	11	2.71	5.12	0.231	2.82	1.39
38	3.21	7.85	0.344	2.52	0.706	12	2.71	5.16	0.233	2.81	1.27
39	3.20	7.81	0.342	2.53	0.704	13	2.72	5.23	0.237	2.80	1.17
40	3.20	7.77	0.340	2.53	0.702	14	2.73	5.32	0.242	2.79	1.08
41	3.20	7.72	0.338	2.53	0.700	15	2.74	5.44	0.248	2.78	1.01
42	3.20	7.69	0.336	2.54	0.698	16	2.76	5.57	0.255	2.76	0.962
43	3.19	7.66	0.334	2.54	0.695	17	2.77	5.72	0.263	2.74	0.915
$H = 30, V_\infty = 5000, \bar{R} = 0$										$H = 30, V_\infty = 5000, \bar{R} = 0$	
0.227	3.31	14.0	0.774	2.07	14.6	25	2.88	6.94	0.330	2.60	0.736
0.3	3.34	14.5	0.811	2.03	14.1	30	2.91	7.37	0.355	2.56	0.709
0.4	3.31	13.9	0.770	2.08	13.4	35	2.92	7.47	0.361	2.55	0.699
0.5	3.26	13.0	0.709	2.15	12.8	40	2.91	7.39	0.356	2.56	0.691
0.6	3.22	12.2	0.655	2.20	12.2	45	2.90	7.29	0.351	2.57	0.684
0.7	3.19	11.5	0.613	2.23	11.7						
0.8	3.16	11.1	0.588	2.25	11.2						
0.9	3.15	10.8	0.569	2.27	10.7						
1.0	3.13	10.6	0.555	2.29	10.3						
1.1	3.12	10.5	0.545	2.30	9.93						
1.2	3.11	10.2	0.531	2.31	9.54						
1.3	3.10	10.1	0.521	2.32	9.19						
1.4	3.09	9.97	0.511	2.33	8.84						
1.5	3.08	9.80	0.500	2.34	8.53						
2.0	3.02	8.84	0.442	2.42	7.17						
2.5	2.95	7.93	0.388	2.50	6.13						
3.0	2.89	7.15	0.342	2.58	5.31						
3.5	2.84	6.55	0.309	2.64	4.64						

Table 26

 $\theta_b = 15^\circ, Y = 1.4$ 

$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$C_x \cdot 10$	$\bar{x}_b$	$i_b \cdot 10$	$p_b \cdot 10$	$C_x \cdot 10$	$i_b \cdot 10$	$p_b \cdot 10$	$C_x \cdot 10$
$M_\infty = \infty$				$M_\infty = 15$				$M_\infty = 6$		
0.741	2.58	0.920	9.35	0.741	2.66	0.943	9.31	3.06	1.06	9.29
0.90	2.55	0.879	8.73	0.90	2.63	0.903	8.69	3.04	1.04	8.67
1.10	2.51	0.826	8.04	1.10	2.59	0.853	8.00	3.01	1.00	7.97
1.30	2.46	0.775	7.43	1.30	2.54	0.806	7.40	2.98	0.969	7.37
1.50	2.42	0.730	6.91	1.50	2.50	0.763	6.88	2.95	0.933	6.85
1.75	2.37	0.680	6.33	1.75	2.46	0.716	6.30	2.91	0.892	6.28
2.00	2.33	0.638	5.82	2.00	2.42	0.675	5.80	2.88	0.857	5.78
2.25	2.29	0.602	5.38	2.25	2.38	0.640	5.37	2.85	0.828	5.35
2.5	2.26	0.571	5.00	2.5	2.35	0.611	4.99	2.83	0.805	4.98
3.0	2.20	0.526	4.37	3.0	2.30	0.566	4.36	2.79	0.772	4.36
3.5	2.16	0.494	3.86	3.5	2.26	0.535	3.85	2.77	0.753	3.88
4.0	2.14	0.472	3.46	4.0	2.24	0.515	3.45	2.76	0.743	3.49
4.5	2.12	0.458	3.12	4.5	2.22	0.503	3.12	2.76	0.739	3.17
5	2.11	0.449	2.85	5	2.21	0.496	2.85	2.76	0.741	2.91
6	2.10	0.448	2.43	6	2.22	0.497	2.44	2.77	0.754	2.53
7	2.12	0.463	2.14	7	2.23	0.511	2.15	2.80	0.775	2.26
8	2.14	0.478	1.93	8	2.26	0.532	1.94	2.82	0.798	2.07
9	2.17	0.500	1.77	9	2.29	0.555	1.80	2.84	0.823	1.93
10	2.21	0.530	1.66	10	2.32	0.583	1.69	2.87	0.845	1.83
12	2.29	0.606	1.53	12	2.39	0.649	1.56	2.90	0.882	1.71
14	2.37	0.682	1.47	14	2.45	0.709	1.50	2.93	0.909	1.63
16	2.42	0.727	1.46	16	2.49	0.749	1.48	2.94	0.928	1.60
18	2.43	0.740	1.46	18	2.50	0.763	1.47	2.95	0.939	1.57
19	2.43	0.736	1.45	20	2.50	0.761	1.47	2.96	0.945	1.56
				26				2.96	0.948	1.53
$M_\infty = 23$				$M_\infty = 10$				$M_\infty = 4$		
0.741	2.61	0.927	9.32	0.741	2.75	0.972	9.31	3.67	1.22	9.16
0.90	2.58	0.888	8.70	0.90	2.73	0.936	8.70	3.67	1.23	8.54
1.10	2.54	0.838	8.01	1.10	2.69	0.890	8.01	3.66	1.22	7.85
1.30	2.50	0.789	7.41	1.30	2.65	0.844	7.41	3.64	1.20	7.26
1.50	2.46	0.745	6.89	1.50	2.61	0.802	6.88	3.62	1.18	6.75
1.75	2.41	0.696	6.31	1.75	2.56	0.756	6.30	3.60	1.15	5.19
2.00	2.37	0.654	5.81	2.00	2.53	0.716	5.81	3.58	1.13	5.70
2.25	2.33	0.618	5.37	2.25	2.49	0.683	5.37	3.56	1.11	5.29
2.5	2.30	0.588	4.99	2.5	2.46	0.655	4.99	3.55	1.09	4.94
3.0	2.24	0.543	4.36	3.0	2.42	0.614	4.26	3.53	1.07	4.33
3.5	2.21	0.512	3.86	3.5	2.39	0.587	3.87	3.52	1.07	3.87
4.0	2.18	0.490	3.45	4.0	2.37	0.570	3.47	3.52	1.07	3.50
4.5	2.16	0.476	3.12	4.5	2.35	0.560	3.14	3.53	1.07	3.21
5	2.15	0.469	2.85	5	2.35	0.555	2.87	3.53	1.08	2.97
6	2.15	0.468	2.43	6	2.35	0.560	2.47	3.55	1.10	2.62
7	2.17	0.482	2.14	7	2.37	0.577	2.18	3.57	1.12	2.37
8	2.19	0.500	1.93	8	2.40	0.601	1.98	3.59	1.13	2.19
9	2.22	0.522	1.78	9	2.43	0.625	1.83	3.60	1.15	2.06
10	2.25	0.551	1.67	10	2.46	0.652	1.73	3.61	1.17	1.97
12	2.33	0.622	1.54	12	2.52	0.708	1.60	3.64	1.19	1.84
14	2.40	0.691	1.48	14	2.56	0.755	1.54	3.65	1.21	1.77
16	2.45	0.734	1.46	15	2.59	0.786	1.51	3.66	1.22	1.72
18	2.46	0.750	1.46	18	2.61	0.800	1.50	3.67	1.23	1.69
20.	2.46	0.743	1.46	20	2.61	0.802	1.49	3.67	1.23	1.67
				25	2.60	0.793	1.48			

Table 27

 $\theta_b = 15^\circ$ 

$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$
$H = 60, V_\infty = 10\,000$											
0.741	3.75	20.6	0.761	2.15	9.33	0.741	3.68	19.1	0.945	1.96	9.64
0.90	3.72	19.1	0.714	2.21	8.68	0.90	3.63	17.6	0.864	2.01	8.99
1.10	3.69	17.7	0.650	2.27	7.96	1.10	3.59	16.2	0.783	2.07	8.26
1.30	3.66	16.6	0.603	2.32	7.33	1.30	3.55	15.0	0.720	2.12	7.63
1.50	3.64	15.7	0.567	2.35	6.77	1.50	3.51	14.0	0.667	2.16	7.07
1.75	3.62	14.9	0.533	2.39	6.17	1.75	3.47	13.0	0.612	2.21	6.46
2.00	3.60	14.3	0.506	2.42	5.66	2.00	3.43	12.2	0.568	2.25	5.92
2.25	3.58	13.8	0.486	2.45	5.22	2.25	3.40	11.5	0.533	2.29	5.46
2.5	3.57	13.4	0.470	2.47	4.83	2.5	3.38	11.1	0.511	2.31	5.05
3.0	3.55	12.8	0.444	2.50	4.18	3.0	3.37	10.7	0.491	2.33	4.39
3.5	3.54	12.4	0.428	2.53	3.68	3.5	3.36	10.5	0.482	2.34	3.87
4.0	3.54	12.5	0.433	2.52	3.28	4.0	3.35	10.5	0.479	2.35	3.46
4.5	3.56	12.9	0.451	2.50	2.96	4.5	3.36	10.5	0.480	2.34	3.13
5	3.57	13.4	0.471	2.47	2.71	5	3.36	10.6	0.486	2.34	2.86
6	3.60	14.4	0.510	2.42	2.34	6	3.38	11.0	0.504	2.32	2.45
7	3.63	15.6	0.562	2.36	2.09	7	3.40	11.4	0.528	2.29	2.17
8	3.67	17.1	0.623	2.30	1.93	8	3.43	12.1	0.565	2.25	1.98
9	3.71	18.5	0.687	2.23	1.83	9	3.47	13.0	0.610	2.21	1.84
10	3.73	19.7	0.739	2.18	1.76	10	3.50	13.8	0.655	2.17	1.75
12	3.74	20.0	0.753	2.17	1.69	12	3.55	15.1	0.722	2.12	1.65
14	3.72	19.2	0.717	2.20	1.64	14	3.56	15.5	0.747	2.10	1.61
16	3.70	18.4	0.680	2.24	1.59	16	3.56	15.3	0.736	2.10	1.58
18	3.70	18.1	0.670	2.25	1.54	18	3.54	14.9	0.716	2.12	1.55
20	3.70	18.2	0.674	2.25	1.50	20	3.53	14.7	0.702	2.13	1.52
$H = 60, V_\infty = 7500$											
0.741	3.85	20.8	0.915	1.96	9.67	0.741	3.55	17.3	0.968	1.91	9.67
0.90	3.81	19.0	0.825	2.02	9.01	0.90	3.49	15.8	0.879	1.97	9.01
1.10	3.76	17.3	0.744	2.08	8.27	1.10	3.43	14.3	0.787	2.04	8.29
1.30	3.73	16.1	0.686	2.13	7.63	1.30	3.38	13.2	0.715	2.09	7.65
1.50	3.70	15.1	0.639	2.17	7.07	1.50	3.34	12.4	0.664	2.13	7.08
2.05	3.63	13.0	0.540	2.26	5.82	1.75	3.30	11.6	0.619	2.17	6.46
2.30	3.60	12.3	0.510	2.29	5.36	2.00	3.28	11.2	0.590	2.20	5.94
2.55	3.59	11.9	0.490	2.31	4.96	2.25	3.26	10.8	0.569	2.22	5.48
3.05	3.58	11.6	0.477	2.33	4.31	2.5	3.25	10.6	0.554	2.23	5.08
3.55	3.58	11.6	0.475	2.33	3.81	3.0	3.22	10.2	0.530	2.26	4.42
4.05	3.58	11.7	0.479	2.32	3.40	3.5	3.21	9.92	0.512	2.28	3.91
4.55	3.59	11.8	0.488	2.31	3.08	4.0	3.19	9.73	0.501	2.29	3.50
5.05	3.60	12.1	0.501	2.30	2.82	4.5	3.19	9.64	0.496	2.29	3.16
6.05	3.62	12.7	0.526	2.27	2.43	5	3.19	9.65	0.496	2.29	2.89
7.05	3.64	13.4	0.560	2.24	2.17	6	3.20	9.90	0.511	2.28	2.48
8.05	3.68	14.4	0.606	2.20	1.99	7	3.22	10.2	0.532	2.26	2.19
9.05	3.71	15.5	0.657	2.15	1.87	8	3.25	10.7	0.563	2.22	1.99
10	3.74	16.4	0.700	2.12	1.79	9	3.29	11.3	0.600	2.19	1.85
12	3.76	17.3	0.744	2.08	1.70	10	3.32	11.9	0.637	2.16	1.75
14	3.76	17.3	0.744	2.08	1.64	12	3.37	13.0	0.706	2.10	1.64
16	3.75	16.8	0.721	2.10	1.60	14	3.40	13.6	0.743	2.07	1.59
18	3.74	16.5	0.704	2.11	1.56	16	3.41	13.7	0.747	2.06	1.56
20	3.74	16.3	0.698	2.12	1.53	18	3.40	13.5	0.735	2.07	1.54
						20	3.39	13.3	0.721	2.09	1.52

Table 27 Continued

 $\theta_b = 15^\circ$ 

$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$
$H = 30, V_\infty = 5000$											
0.741	3.41	16.2	0.937	1.93	9.55	0.741	3.27	14.3	1.12	1.79	9.64
0.90	3.38	15.4	0.871	1.98	8.90	0.90	3.22	13.5	1.04	1.83	9.01
1.10	3.34	14.4	0.808	2.03	8.19	1.10	3.16	12.7	0.963	1.88	8.31
1.30	3.30	13.8	0.761	2.09	7.57	1.30	3.10	11.9	0.898	1.92	7.69
1.50	3.28	13.2	0.725	2.13	7.02	1.50	3.06	11.3	0.844	1.96	7.15
1.75	3.25	12.6	0.685	2.18	6.42	2.05	2.95	10.0	0.734	2.04	5.93
2.00	3.22	12.1	0.652	2.20	5.90	2.30	2.92	9.66	0.698	2.07	5.50
2.25	3.20	11.7	0.624	2.22	5.46	2.55	2.89	9.31	0.669	2.09	5.12
2.5	3.18	11.4	0.602	2.24	5.07	3.05	2.84	8.81	0.626	2.13	4.47
3.0	3.14	10.8	0.564	2.28	4.42	3.55	2.81	8.51	0.599	2.16	3.96
3.5	3.12	10.3	0.536	2.31	3.92	4.05	2.79	8.31	0.581	2.17	3.55
4.0	3.11	10.1	0.520	2.32	3.51	4.55	2.78	8.20	0.572	2.18	3.22
4.5	3.09	10.0	0.513	2.33	3.17	5.05	2.77	8.16	0.568	2.19	2.94
5	3.09	9.99	0.512	2.33	2.90	6.05	2.78	8.21	0.572	2.18	2.54
6	3.10	10.1	0.523	2.32	2.49	7.05	2.79	8.38	0.587	2.17	2.24
7	3.12	10.4	0.542	2.30	2.20	8.05	2.82	8.58	0.606	2.15	2.03
8	3.14	10.8	0.566	2.28	2.00	9.05	2.84	8.84	0.629	2.13	1.88
9	3.17	11.3	0.595	2.25	1.86	10	2.87	9.13	0.655	2.10	1.77
10	3.20	11.8	0.628	2.22	1.75	12	2.93	9.78	0.703	2.06	1.63
12	3.25	12.8	0.694	2.17	1.63	14	2.97	10.3	0.753	2.02	1.56
14	3.29	13.4	0.739	2.11	1.58	16	3.00	10.6	0.784	2.00	1.52
16	3.30	13.7	0.754	2.09	1.55	18	3.02	10.8	0.800	1.99	1.51
18	3.29	13.6	0.750	2.10	1.53	20	3.02	10.9	0.803	1.99	1.50
20	3.29	13.5	0.740	2.11	1.51						
22	3.28	13.3	0.730	2.12	1.50						
24	3.28	13.2	0.725	2.13	1.48						
$H = 30, V_\infty = 4000$											
0.741	3.48	16.8	1.08	1.86	9.61	0.741	3.33	15.9	0.965	1.93	9.64
0.90	3.44	15.8	1.01	1.90	8.99	0.90	3.30	15.1	0.901	1.98	9.00
1.10	3.39	14.8	0.934	1.95	8.29	1.10	3.26	14.3	0.842	2.02	8.28
1.30	3.34	13.9	0.871	1.99	7.67	1.30	3.22	13.6	0.793	2.06	7.66
1.50	3.30	13.2	0.817	2.03	7.13	1.50	3.19	12.9	0.749	2.10	7.11
1.75	3.26	12.4	0.763	2.07	6.54	1.75	3.15	12.2	0.700	2.14	6.50
2.00	3.22	11.7	0.715	2.11	6.02	2.00	3.12	11.7	0.661	2.18	5.98
2.25	3.19	11.1	0.675	2.14	5.57	2.25	3.09	11.2	0.629	2.21	5.53
2.5	3.16	10.7	0.642	2.17	5.17	2.5	3.08	10.8	0.602	2.24	5.14
3.0	3.11	10.0	0.596	2.22	4.52	3.0	3.03	10.2	0.561	2.28	4.48
3.5	3.08	9.59	0.565	2.25	4.00	3.5	3.00	9.81	0.534	2.32	3.97
4.0	3.06	9.30	0.546	2.27	3.58	4.0	2.98	9.55	0.517	2.34	3.55
4.5	3.05	9.13	0.534	2.28	3.24	4.5	2.97	9.41	0.508	2.35	3.22
5	3.04	9.05	0.528	2.28	2.97	5	2.97	9.37	0.505	2.36	2.94
6	3.05	9.10	0.532	2.28	2.54	6	2.98	9.49	0.513	2.35	2.52
7	3.06	9.29	0.545	2.27	2.24	7	3.00	9.77	0.531	2.32	2.23
8	3.08	9.54	0.561	2.25	2.03	8	3.02	10.0	0.551	2.30	2.02
9	3.10	9.87	0.584	2.23	1.87	9	3.04	10.4	0.579	2.26	1.87
10	3.13	10.2	0.612	2.20	1.76	10	3.07	10.9	0.611	2.23	1.76
11	3.19	11.1	0.672	2.15	1.62	12	3.13	11.9	0.679	2.16	1.63
12	3.23	11.9	0.725	2.10	1.55	14	3.17	12.7	0.730	2.12	1.58
13	3.26	12.3	0.757	2.08	1.52	16	3.19	13.0	0.752	2.10	1.55
14	3.27	12.5	0.770	2.07	1.50	18	3.19	13.0	0.753	2.10	1.53
15	3.27	12.5	0.769	2.07	1.50	20	3.18	12.9	0.743	2.10	1.52
16	3.26	12.4	0.762	2.07	1.49	22	3.18	12.7	0.732	2.11	1.51
17	3.26	12.3	0.755	2.08	1.48	24	3.17	12.6	0.725	2.12	1.49

Table 27 Concluded

 $\theta_b = 15^\circ$ 

$x_b$	$i_b \cdot 10$	$\rho_b \cdot 10$	$p_b \cdot 10$	$e_b$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$\rho_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$
$H = 10, V_\infty = 3000$						$H = 30, V_\infty = 5000, \bar{R} = 0$					
0.741	3.17	14.0	1.08	1.81	9.57	0.227	3.46	17.3	1.01	1.87	14.6
0.90	3.12	13.2	1.01	1.85	8.94	0.30	3.49	17.9	1.05	1.84	13.9
1.10	3.07	12.5	0.942	1.90	8.24	0.40	3.45	17.0	0.984	1.89	13.0
1.30	3.02	11.9	0.886	1.94	7.63	0.50	3.40	15.8	0.901	1.95	12.1
1.50	2.98	11.4	0.836	1.98	7.08	0.60	3.35	14.8	0.834	2.01	11.4
1.75	2.93	10.8	0.782	2.02	6.50	0.70	3.33	14.2	0.792	2.05	10.7
2.00	2.89	10.3	0.736	2.05	5.99	0.80	3.31	13.8	0.765	2.08	10.1
2.25	2.85	9.89	0.699	2.09	5.53	0.90	3.29	13.6	0.748	2.10	9.57
2.5	2.82	9.55	0.669	2.11	5.14	1.00	3.28	13.4	0.735	2.12	9.06
3.0	2.77	9.07	0.626	2.15	4.49	1.10	3.27	13.2	0.720	2.14	8.60
3.5	2.74	8.75	0.598	2.18	3.98	1.20	3.26	13.0	0.708	2.15	8.17
4.0	2.72	8.53	0.579	2.20	3.57	1.30	3.25	12.8	0.695	2.17	7.78
4.5	2.71	8.41	0.569	2.21	3.23	1.40	3.24	12.6	0.680	2.18	7.42
5	2.70	8.36	0.565	2.22	2.96	1.50	3.23	12.3	0.664	2.19	7.09
6	2.71	8.39	0.567	2.21	2.53	1.75	3.20	11.7	0.624	2.22	6.36
7	2.73	8.58	0.583	2.20	2.24	2.00	3.16	11.1	0.587	2.25	5.75
8	2.75	8.81	0.603	2.18	2.03	2.25	3.13	10.6	0.556	2.29	5.23
9	2.77	9.07	0.626	2.15	1.87	2.50	3.11	10.3	0.531	2.31	4.78
10	2.80	9.36	0.652	2.13	1.76	2.75	3.09	10.0	0.515	2.33	4.42
12	2.86	9.98	0.706	2.08	1.63	3.00	3.08	9.87	0.505	2.34	4.09
14	2.90	10.4	0.752	2.04	1.56	3.25	3.08	9.78	0.499	2.35	3.80
16	2.92	10.8	0.784	2.01	1.52	3.50	3.08	9.74	0.497	2.35	3.56
18	2.95	10.9	0.798	2.00	1.51	3.75	3.08	9.74	0.496	2.35	3.34
20	2.95	11.0	0.801	2.00	1.50	4.00	3.08	9.75	0.497	2.35	3.15
						4.25	3.08	9.80	0.501	2.34	2.98
						4.50	3.08	9.86	0.504	2.34	2.83
						4.75	3.09	9.88	0.505	2.34	2.69
						5.0	3.09	9.91	0.507	2.34	2.57
						5.5	3.10	10.0	0.518	2.32	2.37
						6.0	3.11	10.3	0.533	2.31	2.21
						6.5	3.13	10.5	0.547	2.29	2.07
						7.0	3.14	10.8	0.564	2.28	1.96
						7.5	3.16	11.1	0.584	2.26	1.88
						8.0	3.18	11.4	0.606	2.24	1.81
						8.5	3.20	11.8	0.629	2.22	1.75
						9.0	3.22	12.1	0.653	2.20	1.70
						9.5	3.24	12.5	0.675	2.19	1.67
						10	3.25	12.8	0.696	2.17	1.64
						15	3.30	13.7	0.754	2.09	1.54
						20	3.28	13.2	0.724	2.13	1.49

Table 28

 $\theta_b = 20^\circ, \gamma = 1.4$ 

$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$C_x \cdot 10$	$i_b \cdot 10$	$p_b \cdot 10$	$C_x \cdot 10$	$i_b \cdot 10$	$p_b \cdot 10$	$C_x \cdot 10$
$M_\infty = \infty$				$M_\infty = 15$				$M_\infty = 6$	
0.658	2.82	1.25	9.75	2.90	1.27	9.72	3.33	1.42	9.70
0.80	2.79	1.20	9.01	2.87	1.23	8.98	3.31	1.39	8.96
1.00	2.75	1.13	8.13	2.83	1.17	8.10	3.28	1.35	8.09
1.20	2.70	1.07	7.40	2.79	1.11	7.37	3.25	1.30	7.37
1.40	2.66	1.01	6.79	2.75	1.05	6.76	3.22	1.26	6.76
1.75	2.60	0.939	5.91	2.69	0.983	5.89	3.17	1.20	5.91
2.00	2.57	0.899	5.40	2.66	0.944	5.39	3.15	1.18	5.43
2.25	2.54	0.869	4.98	2.64	0.916	4.98	3.14	1.16	5.02
2.50	2.53	0.849	4.62	2.62	0.897	4.62	3.13	1.15	4.68
2.75	2.52	0.836	4.31	2.61	0.886	4.32	3.13	1.14	4.39
3.0	2.51	0.831	4.05	2.61	0.881	4.06	3.13	1.14	4.14
3.5	2.52	0.840	3.53	2.62	0.889	3.65	3.14	1.16	3.75
4.0	2.55	0.873	3.32	2.64	0.919	3.34	3.16	1.19	3.46
4.5	2.58	0.917	3.09	2.68	0.963	3.11	3.19	1.22	3.25
5	2.61	0.953	2.92	2.71	1.00	2.94	3.22	1.26	3.09
6	2.69	1.05	2.70	2.77	1.09	2.72	3.27	1.33	2.88
7	2.76	1.16	2.60	2.84	1.18	2.62	3.31	1.39	2.76
8	2.81	1.23	2.56	2.89	1.25	2.57	3.33	1.43	2.70
9	2.83	1.26	2.55	2.91	1.29	2.56	3.35	1.45	2.66
10	2.83	1.26	2.55	2.91	1.29	2.55	3.36	1.47	2.64
12							3.36	1.47	2.62
$M_\infty = 23$				$M_\infty = 10$				$M_\infty = 4$	
0.658	2.85	1.26	9.73	3.01	1.31	9.72	3.96	1.60	9.57
0.80	2.83	1.21	8.99	2.98	1.27	9.00	3.96	1.61	8.84
1.00	2.78	1.15	8.11	2.94	1.21	8.12	3.96	1.61	7.98
1.20	2.74	1.08	7.38	2.90	1.15	7.39	3.95	1.59	7.28
1.40	2.70	1.03	6.77	2.86	1.10	6.77	3.93	1.56	6.69
1.75	2.64	0.957	5.89	2.81	1.03	5.91	3.90	1.53	5.88
2.00	2.61	0.917	5.39	2.78	1.00	5.41	3.89	1.51	5.42
2.25	2.58	0.888	4.97	2.76	0.975	5.00	3.88	1.50	5.03
2.50	2.57	0.868	4.61	2.75	0.959	4.65	3.88	1.50	4.71
2.75	2.56	0.856	4.31	2.74	0.950	4.35	3.89	1.50	4.44
3.0	2.55	0.851	4.05	2.74	0.947	4.09	3.89	1.51	4.22
3.5	2.56	0.859	3.63	2.74	0.958	3.67	3.90	1.53	3.85
4.0	2.58	0.889	3.32	2.77	0.987	3.37	3.92	1.55	3.58
4.5	2.62	0.934	3.09	2.80	1.02	3.15	3.94	1.58	3.38
5	2.65	0.971	2.92	2.83	1.07	2.98	3.96	1.61	3.24
6	2.72	1.06	2.71	2.89	1.15	2.77	4.00	1.66	3.04
7	2.79	1.16	2.60	2.95	1.23	2.66	4.02	1.70	2.92
8	2.84	1.24	2.56	2.99	1.29	2.61	4.04	1.73	2.84
9	2.86	1.27	2.55	3.01	1.32	2.58	4.06	1.75	2.80
10	2.87	1.27	2.54	3.02	1.33	2.57	4.06	1.76	2.77

Table 29

 $\theta_b = 20^\circ$ 

$x_b$	$i_b \cdot 10^3$	$\rho_b \cdot 10^3$	$p_b \cdot 10^3$	$\beta_b$	$C_x \cdot 10^3$	$x_b$	$i_b \cdot 10^3$	$\rho_b \cdot 10^3$	$p_b \cdot 10^3$	$\beta_b$	$C_x \cdot 10^3$
$H = 60, V_\infty = 10\ 000$						$H = 30, V_\infty = 7500$					
0.658	3.88	26.8	1.06	1.93	9.75	0.658	3.82	24.7	12.6	1.78	10.0
0.80	3.85	25.1	0.986	1.99	8.96	0.80	3.78	23.0	11.6	1.83	9.28
1.00	3.81	23.4	0.906	2.05	8.02	1.00	3.74	21.2	10.6	1.88	8.35
1.20	3.79	22.3	0.854	2.09	7.25	1.20	3.70	19.8	9.87	1.93	7.56
1.40	3.77	21.5	0.818	2.12	6.60	1.40	3.67	18.7	9.24	1.97	6.90
1.75	3.76	20.7	0.782	2.15	5.68	1.75	3.62	17.3	8.48	2.02	5.96
2.00	3.75	20.6	0.780	2.15	5.17	2.00	3.61	16.9	8.21	2.04	5.43
2.25	3.76	20.7	0.785	2.14	4.75	2.25	3.61	16.8	8.20	2.04	4.99
2.50	3.76	21.0	0.795	2.14	4.40	2.50	3.61	17.1	8.32	2.03	4.62
2.75	3.77	21.5	0.820	2.11	4.11	2.75	3.63	17.4	8.51	2.02	4.31
3.0	3.80	22.7	0.874	2.07	3.81	3.0	3.64	17.9	8.78	2.00	4.05
3.5	3.84	24.7	0.968	2.00	3.51	3.5	3.67	19.0	9.38	1.96	3.65
4.0	3.88	26.8	1.06	1.93	3.27	4.0	3.70	19.9	9.93	1.93	3.37
4.5	3.92	29.1	1.17	1.86	3.11	4.5	3.73	21.1	10.6	1.89	3.17
5	3.95	30.9	1.26	1.81	3.02	5	3.77	22.4	11.3	1.84	3.03
6	3.96	31.7	1.30	1.78	2.92	6	3.82	24.6	12.5	1.78	2.88
7	3.94	30.3	1.23	1.82	2.84	7	3.83	25.0	12.8	1.76	2.80
8	3.91	28.8	1.16	1.87	2.75	8	3.82	24.7	12.6	1.77	2.75
9	3.90	28.4	1.14	1.88	2.67	9	3.81	24.0	12.2	1.79	2.70
10.	3.91	28.6	1.15	1.87	2.61	10	3.80	23.5	11.9	1.81	2.65
$H = 60, V_\infty = 7500$						$H = 30, V_\infty = 6000$					
0.658	3.98	27.3	1.23	1.78	10.0	0.658	3.72	22.3	13.0	1.73	10.0
0.80	3.94	25.0	1.12	1.84	9.30	0.80	3.67	20.6	11.9	1.79	9.31
1.00	3.90	23.0	1.01	1.90	8.35	1.00	3.60	18.8	10.7	1.85	8.37
1.20	3.87	21.6	0.953	1.94	7.56	1.20	3.56	17.4	9.83	1.90	7.58
1.40	3.85	20.6	0.901	1.97	6.89	1.40	3.52	16.5	9.27	1.94	6.91
1.80	3.81	19.0	0.822	2.03	5.83	1.75	3.50	15.8	8.81	1.97	5.98
2.05	3.80	18.6	0.806	2.04	5.32	2.00	3.49	15.6	8.68	1.98	5.46
2.30	3.80	18.9	0.817	2.03	4.89	2.25	3.49	15.6	8.67	1.98	5.02
2.55	3.82	19.4	0.842	2.01	4.53	2.50	3.49	15.7	8.71	1.98	4.65
2.80	3.83	20.0	0.875	1.99	4.24	2.75	3.49	15.8	8.80	1.97	4.35
3.05	3.85	20.9	0.914	1.96	3.99	3.0	3.50	16.0	8.96	1.96	4.09
3.55	3.88	22.2	0.983	1.92	3.62	3.5	3.53	16.8	9.40	1.93	3.68
4.05	3.92	23.8	1.05	1.88	3.36	4.0	3.56	17.5	9.89	1.90	3.39
4.55	3.95	25.4	1.13	1.83	3.19	4.5	3.59	18.4	10.4	1.86	3.18
5.05	3.93	27.0	1.22	1.79	3.07	5	3.63	19.4	11.1	1.83	3.04
6.05	4.01	28.5	1.29	1.75	2.94	6	3.68	21.1	12.2	1.77	2.86
7.05	4.00	28.1	1.27	1.76	2.85	7	3.71	21.9	12.7	1.74	2.78
8.05	3.98	27.2	1.22	1.78	2.78	8	3.71	21.9	12.8	1.74	2.73
9.05	3.97	26.4	1.19	1.80	2.71	9	3.70	21.6	12.5	1.75	2.69
10	3.97	26.3	1.18	1.81	2.65	10	3.69	21.2	12.3	1.76	2.65

Table 29 Continued

$\theta_b = 20^\circ$											
$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$p_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$
$H = 30, V_\infty = 5000$						$H = 30, V_\infty = 3000$					
0.658	3.59	20.6	1.25	1.73	9.97	0.658	3.49	18.0	1.46	11.61	10.0
0.80	3.53	19.7	1.18	1.77	9.19	0.80	3.44	17.1	1.35	11.65	9.30
1.00	3.51	18.6	1.09	1.81	8.27	1.00	3.38	16.1	1.28	11.70	8.41
1.20	3.48	17.8	1.04	1.85	7.51	1.20	3.33	15.2	1.20	11.74	7.65
1.40	3.46	17.2	1.00	1.88	6.86	1.40	3.29	14.6	1.14	11.77	7.02
1.75	3.43	16.5	0.951	1.91	5.96	2.05	3.19	13.2	1.01	11.85	5.51
2.00	3.41	16.2	0.929	1.93	5.45	2.30	3.17	12.9	0.983	1.86	5.09
2.25	3.41	16.0	0.915	1.94	5.03	2.55	3.16	12.7	0.972	1.87	4.73
2.50	3.40	15.9	0.907	1.95	4.67	2.80	3.16	12.7	0.96	1.88	4.43
2.75	3.40	15.8	0.906	1.95	4.36	3.05	3.16	12.7	0.963	1.88	4.17
3.0	3.40	16.0	0.913	1.94	4.11	3.55	3.17	12.8	0.976	1.87	3.75
3.5	3.43	16.4	0.948	1.91	3.70	4.05	3.19	13.1	1.00	1.85	3.45
4.0	3.46	17.2	0.999	1.88	3.41	4.55	3.22	13.5	1.04	1.83	3.21
4.5	3.48	17.8	1.04	1.85	3.20	5.05	3.24	13.9	1.07	1.81	3.04
5	3.51	18.5	1.09	1.82	3.04	6.05	3.30	14.8	1.16	1.76	2.82
6	3.56	19.9	1.19	1.76	2.85	7.05	3.35	15.6	1.23	1.72	2.70
7	3.60	20.8	1.26	1.72	2.76	8.05	3.39	16.2	1.29	1.69	2.64
8	3.61	21.0	1.28	1.71	2.71	9.05	3.41	16.5	1.32	1.68	2.61
9	3.60	20.9	1.27	1.71	2.67	10	3.41	16.6	1.33	1.67	2.59
10	3.59	20.7	1.26	1.72	2.64	12	3.40	16.5	1.32	1.68	2.57
12	3.58	20.4	1.23	1.73	2.59						
$H = 30, V_\infty = 4000$						$H = 10, V_\infty = 5000$					
0.658	3.65	21.1	1.40	1.68	10.0	0.658	3.51	20.2	1.28	1.74	10.0
0.80	3.62	20.1	1.33	1.72	9.28	0.80	3.48	19.2	1.21	1.78	9.29
1.00	3.57	18.8	1.23	1.77	8.38	1.00	3.44	18.2	1.13	1.82	8.37
1.20	3.53	17.8	1.16	1.81	7.64	1.20	3.41	17.5	1.08	1.86	7.60
1.40	3.49	17.0	1.09	1.84	6.99	1.40	3.38	16.8	1.02	1.89	6.95
1.75	3.44	16.0	1.02	1.89	6.10	1.75	3.33	15.9	0.959	1.94	6.04
2.00	3.42	15.4	0.979	1.92	5.58	2.00	3.31	15.5	0.929	1.96	5.53
2.25	3.40	15.0	0.950	1.94	5.14	2.25	3.30	15.2	0.909	1.97	5.10
2.50	3.39	14.8	0.933	1.95	4.77	2.50	3.29	15.0	0.888	1.98	4.73
2.75	3.38	14.7	0.925	1.95	4.46	2.75	3.29	15.0	0.869	1.98	4.42
3.0	3.38	14.6	0.923	1.95	4.19	3.0	3.30	15.0	0.849	1.98	4.15
3.5	3.39	14.9	0.940	1.94	3.77	3.5	3.31	15.4	0.928	1.96	3.74
4.0	3.42	15.3	0.974	1.92	3.46	4.0	3.34	16.1	0.976	1.93	3.43
4.5	3.44	15.8	1.00	1.90	3.22	4.5	3.37	16.6	1.01	1.90	3.21
5	3.46	16.3	1.04	1.88	3.05	5	3.40	17.3	1.06	1.87	3.05
6	3.51	17.5	1.13	1.82	2.82	6	3.45	18.6	1.16	1.80	2.85
7	3.56	18.6	1.22	1.78	2.71	7	3.50	19.7	1.24	1.76	2.75
8	3.59	19.4	1.27	1.75	2.65	8	3.51	20.1	1.28	1.74	2.70
9	3.60	19.7	1.29	1.74	2.62	9	3.51	20.1	1.28	1.74	2.67
10	3.60	19.7	1.29	1.74	2.61	10	3.51	19.9	1.26	1.75	2.64
12	3.59	19.4	1.27	1.75	2.57	12	3.49	19.6	1.23	1.76	2.59

Table 29 Concluded

 $\theta_b = 20^\circ$ 

$x_b$	$i_b \cdot 10$	$\rho_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$	$x_b$	$i_b \cdot 10$	$\rho_b \cdot 10$	$p_b \cdot 10$	$\beta_b$	$C_x \cdot 10$
$H = 10, V_\infty = 3000$						$H = 30, V_\infty = 5000, R = 0$					
0.658	3.39	17.4	1.43	1.62	9.98	0.227	3.62	21.4	1.30	1.70	14.6
0.80	3.35	16.6	1.35	1.66	9.24	0.30	3.64	22.0	1.35	1.67	13.7
1.00	3.29	15.8	1.26	1.71	8.34	0.40	3.59	20.6	1.25	1.72	12.6
1.20	3.25	15.1	1.19	1.75	7.60	0.50	3.54	19.2	1.14	1.78	11.6
1.40	3.21	14.5	1.13	1.78	6.96	0.60	3.50	18.2	1.07	1.83	10.7
1.75	3.15	13.6	1.05	1.83	6.07	0.70	3.48	17.7	1.03	1.85	9.97
2.00	3.12	13.2	1.01	1.85	5.56	0.80	3.47	17.4	1.01	1.87	9.30
2.25	3.10	13.0	0.986	1.87	5.13	0.90	3.46	17.3	1.00	1.87	8.70
2.50	3.09	12.8	0.969	1.88	4.76	1.00	3.45	17.1	0.992	1.88	8.18
2.75	3.08	12.7	0.961	1.89	4.45	1.10	3.44	16.9	0.979	1.89	7.71
3.0	3.08	12.7	0.959	1.89	4.19	1.20	3.43	16.6	0.960	1.90	7.29
3.5	3.09	12.8	0.971	1.88	3.77	1.30	3.42	16.4	0.941	1.92	6.91
4.0	3.11	13.1	1.00	1.86	3.45	1.40	3.41	16.1	0.922	1.93	6.56
4.5	3.14	13.5	1.03	1.84	3.22	1.50	3.40	15.8	0.906	1.95	6.25
5	3.17	13.9	1.07	1.81	3.04	1.75	3.38	15.4	0.877	1.97	5.58
6	3.23	14.7	1.15	1.77	2.82	2.00	3.37	15.3	0.864	1.98	5.05
7	3.28	15.5	1.23	1.72	2.70	2.25	3.38	15.3	0.869	1.98	4.61
8	3.32	16.1	1.29	1.69	2.64	2.50	3.39	15.6	0.888	1.96	4.26
9	3.33	16.4	1.32	1.67	2.61	2.75	3.41	15.9	0.910	1.94	3.98
10	3.34	16.4	1.33	1.67	2.59	3.00	3.42	16.3	0.935	1.92	3.74
						3.25	3.43	16.6	0.962	1.90	3.55
						3.50	3.45	17.1	0.995	1.88	3.39
						3.75	3.47	17.6	1.02	1.86	3.26
						4.0	3.49	18.0	1.05	1.84	3.15
						4.5	3.53	18.9	1.12	1.80	2.98
						5.0	3.56	19.9	1.19	1.76	2.88
						5.5	3.59	20.6	1.25	1.73	2.81
						6.0	3.60	21.0	1.27	1.71	2.77
						6.5	3.61	21.2	1.29	1.71	2.74
						7.0	3.61	21.1	1.29	1.71	2.71
						7.5	3.61	21.0	1.28	1.71	2.69
						8.0	3.60	20.9	1.27	1.72	2.67
						8.5	3.59	20.7	1.25	1.72	2.66
						9.0	3.59	20.5	1.24	1.73	2.63
						9.5	3.58	20.4	1.23	1.73	2.62
						10.0	3.58	20.4	1.23	1.74	2.60
						10.5	3.58	20.3	1.23	1.74	2.58
						11.0	3.58	20.3	1.23	1.74	2.57
						11.5	3.58	20.3	1.23	1.74	2.56
						12.0	3.58	20.4	1.23	1.74	2.55

Table 30

 $\theta_b = 0^\circ, \gamma = 1.4$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$
$M_\infty = \infty, x = 1$									
0	1.00	1.91	0.317	0.000	0.903	0.0231	0.000	1.43	0.127
0.1	1.11	2.08	0.495	0.076	0.856	0.0232	0.172	1.40	0.128
0.2	1.80	2.19	0.617	0.146	0.788	0.0232	0.325	1.31	0.128
0.3	3.40	2.21	0.780	0.209	0.695	0.0232	0.473	1.20	0.129
0.4	2.81	2.19	0.920	0.268	0.565	0.0234	0.597	1.05	0.131
0.5	3.24	2.13	1.05	0.329	0.426	0.0239	0.715	0.930	0.134
0.6	3.53	2.04	1.21	0.392	0.310	0.0249	0.830	0.763	0.139
0.7	3.88	1.90	1.36	0.457	0.190	0.0266	0.947	0.615	0.146
0.8	1.16	1.71	1.56	0.534	0.114	0.0304	1.17	0.480	0.178
0.9	1.42	1.50	1.83	0.622	0.0640	0.0387	1.47	0.375	0.254
1.0	1.66	1.26	2.16	0.727	0.0369	0.0633	1.80	0.284	0.408
$M_\infty = \infty, x = 4.4$									
0	3.000	1.55	0.155	0.000	0.687	0.0088	0.000	1.25	0.0714
0.1	0.185	1.46	0.156	0.044	0.638	0.0088	0.133	1.18	0.0715
0.2	0.345	1.39	0.156	0.084	0.592	0.0088	0.255	1.09	0.0720
0.3	0.500	1.28	0.156	0.118	0.534	0.0089	0.363	0.930	0.0727
0.4	0.630	1.17	0.157	0.149	0.452	0.0089	0.465	0.845	0.0745
0.5	0.760	1.03	0.159	0.180	0.349	0.0090	0.565	0.690	0.0775
0.6	0.875	0.878	0.162	0.211	0.239	0.0091	0.665	0.577	0.0820
0.7	1.09	0.745	0.182	0.244	0.154	0.0093	0.765	0.377	0.0890
0.8	1.46	0.610	0.232	0.275	0.0900	0.0096	0.872	0.270	0.101
0.9	1.79	0.462	0.325	0.310	0.0540	0.0114	1.01	0.207	0.124
1.0	2.14	0.309	0.529	0.350	0.0315	0.0120	1.24	0.168	0.210
$M_\infty = \infty, x = 7.05$									
0	0.000	1.39	0.105	0.00	1.94	0.326	0.000	1.03	0.0365
0.1	0.178	1.31	0.105	1.11	2.23	0.500	0.085	0.960	0.0364
0.2	0.330	1.22	0.106	1.86	2.22	0.660	0.153	0.865	0.0367
0.3	0.467	1.12	0.107	2.40	2.25	0.800	0.216	0.755	0.0370
0.4	0.598	1.00	0.108	2.86	2.23	0.940	0.280	0.505	0.0377
0.5	0.715	0.857	0.111	3.24	2.18	1.08	0.341	0.452	0.0390
0.6	0.837	0.698	0.115	3.60	2.07	1.24	0.409	0.313	0.0415
0.7	0.948	0.543	0.121	3.90	1.94	1.40	0.489	0.207	0.0460
0.8	1.08	0.408	0.134	4.17	1.76	1.60	0.578	0.148	0.0548
0.9	1.37	0.292	0.190	4.42	1.55	1.86	0.685	0.115	0.0729
1.0	1.66	0.189	0.324	4.66	1.32	2.19	0.794	0.104	0.102
$M_\infty = \infty, x = 13.9$									
0	0.000	1.16	0.0566	0.000	1.64	0.181	0.0000	0.813	0.0154
0.1	0.140	1.09	0.0565	0.175	1.55	0.181	0.0280	0.735	0.0156
0.2	0.255	1.03	0.0570	0.320	1.46	0.181	0.0555	0.606	0.0156
0.3	0.358	0.928	0.0575	0.480	1.39	0.181	0.0790	0.425	0.0156
0.4	0.457	0.798	0.0590	0.613	1.25	0.182	0.102	0.235	0.0159
0.5	0.555	0.657	0.0605	0.720	1.12	0.184	0.127	0.130	0.0165
0.6	0.653	0.497	0.0635	0.860	0.967	0.195	0.156	0.085	0.0180
0.7	0.756	0.360	0.0685	1.22	0.875	0.233	0.199	0.067	0.0209
0.8	0.862	0.245	0.0770	1.60	0.715	0.302	0.251	0.054	0.0255
0.9	0.970	0.160	0.0935	1.97	0.550	0.430	0.319	0.066	0.0324
1.0	1.15	0.0925	0.158	2.32	0.422	0.645	0.396	0.068	0.0426
$M_\infty = 23, x = 1$									
$M_\infty = 23, x = 6.05$									
$M_\infty = 23, x = 12$									
$M_\infty = 23, x = 27.2$									
$M_\infty = 23, x = 3.8$									
$M_\infty = 23, x = 100$									

Table 30 Continued

$\theta_b = 0^\circ, \gamma = 1.4$

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$
$M_\infty = 15, x = 1$				$M_\infty = 15, x = 35$				$M_\infty = 10, x = 7$	
0	0.00	1.98	0.331	0.000	1.07	0.0396	0.000	1.59	0.141
0.1	1.11	2.18	0.515	0.055	1.01	0.0397	0.140	1.48	0.141
0.2	1.86	2.27	0.665	0.102	0.850	0.0400	0.265	1.37	0.142
0.3	2.42	2.30	0.820	0.143	0.675	0.0404	0.386	1.22	0.145
0.4	2.86	2.28	0.970	0.185	0.485	0.0414	0.493	1.08	0.149
0.5	3.26	2.23	1.11	0.231	0.315	0.0432	0.592	0.905	0.155
0.6	3.60	2.13	1.26	0.290	0.215	0.0475	0.688	0.754	0.164
0.7	3.91	2.00	1.43	0.368	0.180	0.0554	0.790	0.620	0.178
0.8	4.18	1.82	1.62	0.458	0.165	0.0680	1.04	0.550	0.226
0.9	4.42	1.62	1.89	0.555	0.165	0.0863	1.33	0.510	0.318
1.0	4.64	1.40	2.22	0.656	0.166	0.108	1.62	0.499	0.449
$M_\infty = 15, x = 5$				$M_\infty = 15, x = 100$				$M_\infty = 10, x = 15$	
0	0.000	1.59	0.157	0.0000	0.972	0.0277	0.000	1.39	0.0887
0.1	0.175	1.51	0.157	0.0065	0.745	0.0278	0.080	1.27	0.0890
0.2	0.340	1.41	0.158	0.0140	0.512	0.0279	0.154	1.12	0.0900
0.3	0.470	1.30	0.160	0.0240	0.288	0.0281	0.222	0.955	0.0920
0.4	0.595	1.17	0.162	0.0360	0.153	0.0290	0.290	0.772	0.0950
0.5	0.715	1.02	0.164	0.0545	0.128	0.0304	0.362	0.584	0.101
0.6	0.820	0.863	0.168	0.0840	0.124	0.0332	0.449	0.451	0.111
0.7	1.00	0.720	0.186	0.133	0.124	0.0378	0.555	0.391	0.126
0.8	1.34	0.597	0.247	0.198	0.126	0.0443	0.667	0.375	0.150
0.9	1.66	0.490	0.350	0.272	0.129	0.0532	0.822	0.375	0.190
1.0	1.99	0.413	0.524	0.359	0.137	0.0646	1.04	0.383	0.258
$M_\infty = 15, x = 7$				$M_\infty = 10, x = 1$				$M_\infty = 10, x = 35$	
0	0.000	1.48	0.122	0.00	2.05	0.346	0.000	1.27	0.0651
0.1	0.162	1.40	0.122	1.12	2.26	0.539	0.023	1.11	0.0650
0.2	0.305	1.29	0.123	1.87	2.36	0.710	0.044	0.898	0.0655
0.3	0.435	1.17	0.125	2.43	2.40	0.862	0.066	0.652	0.0665
0.4	0.555	1.03	0.127	2.86	2.38	1.02	0.092	0.408	0.0685
0.5	0.665	0.883	0.130	3.24	2.33	1.15	0.130	0.315	0.0731
0.6	0.775	0.720	0.136	3.58	2.23	1.31	0.191	0.297	0.0805
0.7	0.870	0.575	0.143	3.88	2.10	1.50	0.274	0.292	0.0928
0.8	1.08	0.460	0.174	4.14	1.93	1.72	0.370	0.294	0.109
0.9	1.36	0.385	0.250	4.38	1.75	1.96	0.475	0.305	0.131
1.0	1.65	0.331	0.385	4.60	1.57	2.28	0.611	0.318	0.159
$M_\infty = 15, x = 15$				$M_\infty = 10, x = 5$				$M_\infty = 10, x = 100$	
0	0.000	1.25	0.0686	0.000	1.69	0.176	0.000	1.26	0.0641
0.1	0.110	1.17	0.0680	0.159	1.60	0.177	0.010	0.725	0.0641
0.2	0.205	1.060	0.0685	0.300	1.48	0.178	0.018	0.420	0.0640
0.3	0.290	0.930	0.0695	0.435	1.36	0.180	0.024	0.301	0.0640
0.4	0.375	0.775	0.0710	0.590	1.21	0.183	0.024	0.257	0.0644
0.5	0.460	0.600	0.0740	0.649	1.06	0.186	0.018	0.245	0.0656
0.6	0.550	0.440	0.0805	0.730	0.910	0.193	0.039	0.245	0.0683
0.7	0.645	0.330	0.0910	0.930	0.780	0.226	0.132	0.250	0.0740
0.8	0.735	0.257	0.107	1.33	0.680	0.301	0.203	0.257	0.0830
0.9	0.870	0.220	0.135	1.65	0.617	0.416	0.263	0.265	0.0947
1.0	1.07	0.222	0.200	1.96	0.582	0.590	0.313	0.283	0.109

Table 30 Concluded

 $\theta_b = 0^\circ, \gamma = 1.4$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$
$M_\infty = 6, x = 1$				$M_\infty = 6, x = 35$				$M_\infty = 4, x = 15$	
0	0.00	2.32	0.405	0.000	1.84	0.178	0.000	2.66	0.402
0.1	1.16	2.56	0.630	0.014	1.30	0.178	0.017	2.26	0.402
0.2	1.90	2.68	0.820	0.022	0.883	0.178	0.028	1.86	0.403
0.3	2.42	2.72	1.00	0.024	0.744	0.179	0.033	1.67	0.405
0.4	2.87	2.72	1.16	0.026	0.704	0.182	0.031	1.59	0.408
0.5	3.22	2.68	1.34	0.004	0.690	0.185	0.017	1.57	0.417
0.6	3.54	2.59	1.52	0.041	0.700	0.194	0.067	1.57	0.439
0.7	3.81	2.46	1.71	0.122	0.704	0.212	0.193	1.60	0.474
0.8	4.06	2.33	1.94	0.228	0.728	0.234	0.356	1.65	0.533
0.9	4.28	2.20	2.18	0.367	0.754	0.265	0.592	1.72	0.616
1.0	4.47	2.10	2.46	0.545	0.791	0.310	0.874	1.79	0.719
$M_\infty = 6, x = 5$				$M_\infty = 4, x = 1$				$M_\infty = 4, x = 35$	
0	0.00	2.02	0.247	0.00	2.83	0.495	0.000	2.72	0.431
0.1	0.11	1.89	0.248	1.21	3.17	0.790	0.012	1.95	0.431
0.2	0.22	1.75	0.250	1.94	3.33	1.05	0.022	1.68	0.431
0.3	0.31	1.60	0.254	2.47	3.41	1.27	0.030	1.58	0.429
0.4	0.40	1.42	0.262	2.86	3.42	1.48	0.038	1.56	0.425
0.5	0.46	1.25	0.268	3.19	3.39	1.69	0.046	1.54	0.422
0.6	0.57	1.13	0.291	3.46	3.33	1.90	0.048	1.54	0.423
0.7	0.91	1.08	0.366	3.68	3.24	2.11	0.008	1.56	0.445
0.8	1.26	1.06	0.476	3.88	3.18	2.33	0.119	1.58	0.492
0.9	1.59	1.07	0.625	4.06	3.13	2.54	0.288	1.63	0.573
1.0	1.89	1.10	0.787	4.20	3.09	2.77	0.484	1.69	0.675
$M_\infty = 6, x = 7$				$M_\infty = 4, x = 5$					
0	0.000	1.94	0.215	0.000	2.69	0.416			
0.1	0.080	1.82	0.218	0.050	2.52	0.420			
0.2	0.165	1.64	0.220	0.095	2.33	0.422			
0.3	0.249	1.45	0.227	0.135	2.12	0.429			
0.4	0.326	1.23	0.234	0.170	1.94	0.435			
0.5	0.405	1.07	0.243	0.180	1.83	0.441			
0.6	0.485	0.98	0.260	0.507	1.83	0.528			
0.7	0.665	0.94	0.306	0.825	1.86	0.646			
0.8	0.969	0.93	0.389	1.20	1.92	0.788			
0.9	1.26	0.96	0.493	1.62	1.99	0.945			
1.0	1.55	1.01	0.637	1.78	2.08	1.13			
$M_\infty = 6, x = 15$				$M_\infty = 4, x = 7$					
0	0.000	1.83	0.177	0.000	2.66	0.400			
0.1	0.012	1.62	0.177	0.020	2.42	0.401			
0.2	0.036	1.40	0.179	0.050	2.19	0.405			
0.3	0.072	1.11	0.183	0.080	1.97	0.412			
0.4	0.110	0.890	0.190	0.120	1.81	0.422			
0.5	0.165	0.800	0.204	0.155	1.71	0.436			
0.6	0.239	0.776	0.217	0.245	1.68	0.463			
0.7	0.361	0.780	0.243	0.580	1.75	0.566			
0.8	0.541	0.800	0.293	0.880	1.81	0.678			
0.9	0.730	0.831	0.349	1.17	1.89	0.810			
1.0	0.963	0.874	0.426	1.44	1.97	0.965			

Table 31

$\theta_b = 0^\circ$	$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$
$H = 60, V_\infty = 10\ 000, x = 3.05$											
0	0.000	3.22	0.521	0.159	3.07	0.000	2.72	0.149	0.0383	3.89	
0.1	0.155	3.07	0.540	0.159	3.24	0.158	2.50	0.160	0.0382	4.12	
0.2	0.303	2.90	0.560	0.159	3.51	0.233	2.20	0.165	0.0384	4.74	
0.3	0.453	2.70	0.595	0.160	3.82	0.298	1.85	0.190	0.0386	5.63	
0.4	0.617	2.47	0.630	0.160	4.14	0.359	1.41	0.228	0.0390	6.88	
0.5	0.770	2.21	0.680	0.162	4.47	0.416	0.880	0.300	0.0396	8.25	
0.6	0.961	1.88	0.740	0.166	4.80	0.476	0.450	0.510	0.0403	10.0	
0.7	1.26	1.49	0.960	0.189	5.58	0.544	0.210	0.844	0.0433	12.0	
0.8	1.62	1.07	1.61	0.245	6.62	0.623	0.112	1.45	0.0509	14.4	
0.9	1.98	0.675	3.22	0.354	8.09	0.715	0.0810	2.37	0.0655	16.9	
1.0	2.37	0.369	7.98	0.619	10.2	0.812	0.0785	4.23	0.0931	18.1	
$H = 60, V_\infty = 10\ 000, x = 5.32$											
0	0.000	3.10	0.368	0.107	3.26	0.000	3.19	0.479	0.178	2.82	
0.1	0.185	2.94	0.395	0.108	3.49	0.197	3.00	0.495	0.179	3.03	
0.2	0.347	2.73	0.420	0.108	3.77	0.380	2.76	0.518	0.179	3.30	
0.3	0.493	2.48	0.440	0.108	4.11	0.558	2.48	0.551	0.180	3.65	
0.4	0.622	2.22	0.464	0.109	4.52	0.732	2.20	0.598	0.181	3.96	
0.5	0.739	1.87	0.510	0.111	5.08	0.889	1.92	0.649	0.185	4.23	
0.6	0.862	1.38	0.635	0.114	5.84	1.03	1.64	0.760	0.191	4.64	
0.7	0.972	0.972	0.820	0.121	6.98	1.27	1.33	1.11	0.221	5.45	
0.8	1.14	0.628	1.40	0.142	8.59	1.64	0.967	1.80	0.294	6.56	
0.9	1.39	0.349	2.88	0.210	10.5	2.04	0.607	3.20	0.422	7.56	
1.0	1.73	0.228	6.25	0.356	11.5	2.41	0.427	6.31	0.671	8.30	
$H = 60, V_\infty = 10\ 000, x = 7.05$											
0	0.000	3.04	0.301	0.0860	3.37	0.000	3.13	0.415	0.152	2.90	
0.1	0.160	2.89	0.303	0.0853	3.59	0.197	2.95	0.434	0.152	3.13	
0.2	0.310	2.68	0.310	0.0860	3.89	0.377	2.71	0.452	0.152	3.43	
0.3	0.446	2.42	0.340	0.0869	4.27	0.552	2.43	0.481	0.153	3.75	
0.4	0.570	2.12	0.380	0.0886	4.69	0.705	2.14	0.525	0.155	4.06	
0.5	0.682	1.79	0.445	0.0918	5.32	0.842	1.82	0.600	0.160	4.40	
0.6	0.781	1.40	0.560	0.0960	6.36	0.958	1.46	0.771	0.169	5.02	
0.7	0.872	0.960	0.830	0.103	7.88	1.10	1.11	1.07	0.187	6.13	
0.8	1.00	0.495	1.40	0.117	9.76	1.40	0.771	1.61	0.235	7.20	
0.9	1.21	0.260	2.56	0.160	11.3	1.78	0.495	2.88	0.339	8.06	
1.0	1.48	0.178	5.78	0.269	12.6	2.13	0.354	5.93	0.540	8.91	
$H = 60, V_\infty = 10\ 000, x = 16.3$											
0	0.000	2.89	0.179	0.0482	3.65						
0.1	0.100	2.73	0.185	0.0480	3.88						
0.2	0.185	2.48	0.190	0.0478	4.24						
0.3	0.265	2.15	0.215	0.0478	4.76						
0.4	0.340	1.76	0.247	0.0479	5.36						
0.5	0.421	1.21	0.300	0.0486	6.31						
0.6	0.510	0.751	0.460	0.0503	7.97						
0.7	0.610	0.374	0.860	0.0545	10.3						
0.8	0.715	0.160	1.46	0.0634	13.0						
0.9	0.814	0.0990	2.43	0.0800	15.1						
1.0	0.939	0.0935	4.60	0.119	16.8						

Table 31 Continued

$\theta_b = 0^\circ$											
$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 60, V_\infty = 7500, x = 10.2$						$H = 30, V_\infty = 7500, x = 3.05$					
0	0.000	2.90	0.227	0.0784	3.20	0.000	2.96	0.464	0.194	2.82	
0.1	0.135	2.63	0.240	0.0778	3.50	0.218	2.78	0.464	0.193	3.02	
0.2	0.240	2.34	0.250	0.0780	3.84	0.403	2.58	0.495	0.193	3.23	
0.3	0.338	2.00	0.273	0.0775	4.28	0.591	2.37	0.537	0.194	3.45	
0.4	0.434	1.62	0.320	0.0777	5.05	0.749	2.15	0.576	0.197	3.70	
0.5	0.530	1.17	0.423	0.0797	6.15	0.913	1.91	0.658	0.202	4.04	
0.6	0.650	0.760	0.578	0.0834	7.27	1.11	1.63	0.821	0.214	4.52	
0.7	0.777	0.444	0.843	0.0905	8.28	1.35	1.35	1.12	0.246	5.14	
0.8	0.900	0.287	1.31	0.104	9.58	1.70	0.981	1.71	0.315	5.90	
0.9	1.03	0.200	2.32	0.134	11.4	2.11	0.629	3.04	0.451	6.83	
1.0	1.23	0.163	4.51	0.205	12.5	2.47	0.231	6.14	0.737	8.06	
$H = 60, V_\infty = 7500, x = 12$						$H = 30, V_\infty = 7500, x = 4.9$					
0	0.000	2.86	0.204	0.0696	3.26	0.000	2.81	0.342	0.135	2.99	
0.1	0.137	2.60	0.210	0.0695	3.52	0.187	2.63	0.360	0.133	3.19	
0.2	0.246	2.31	0.227	0.0692	3.90	0.349	2.43	0.380	0.135	3.42	
0.3	0.342	1.97	0.250	0.0695	4.37	0.489	2.19	0.420	0.138	3.68	
0.4	0.430	1.56	0.300	0.0700	4.97	0.622	1.90	0.461	0.142	4.03	
0.5	0.515	1.10	0.390	0.0706	5.92	0.758	1.58	0.562	0.148	4.54	
0.6	0.608	0.671	0.540	0.0726	7.26	0.899	1.26	0.723	0.156	5.20	
0.7	0.715	0.403	0.815	0.0788	8.68	1.07	0.897	0.970	0.168	6.17	
0.8	0.832	0.260	1.36	0.0922	10.2	1.29	0.589	1.43	0.197	7.29	
0.9	0.947	0.181	2.38	0.116	12.2	1.56	0.408	2.68	0.272	8.37	
1.0	1.12	0.146	4.28	0.176	13.2	1.91	0.289	5.70	0.443	9.62	
$H = 60, V_\infty = 7500, x = 27.2$						$H = 30, V_\infty = 7500, x = 10$					
0	0.000	2.64	0.113	0.0363	3.54	0.000	2.63	0.223	0.0836	3.22	
0.1	0.093	2.43	0.120	0.0364	3.75	0.144	2.41	0.229	0.0831	3.42	
0.2	0.170	2.08	0.127	0.0364	4.15	0.273	2.17	0.251	0.0829	3.71	
0.3	0.233	1.62	0.146	0.0366	4.90	0.386	1.90	0.279	0.0831	4.18	
0.4	0.295	1.16	0.192	0.0373	6.07	0.486	1.57	0.321	0.0839	4.69	
0.5	0.359	0.705	0.285	0.0383	7.52	0.578	1.21	0.422	0.0851	5.76	
0.6	0.426	0.320	0.490	0.0400	9.37	0.687	0.800	0.561	0.0892	6.79	
0.7	0.487	0.200	0.810	0.0439	11.5	0.811	0.472	0.822	0.0971	7.93	
0.8	0.548	0.131	1.34	0.0505	13.7	0.939	0.311	1.36	0.110	9.28	
0.9	0.632	0.110	2.05	0.0651	15.1	1.11	0.220	2.30	0.142	11.0	
1.0	0.739	0.097	3.30	0.0915	16.0	1.30	0.168	4.70	0.221	12.4	
$H = 30, V_\infty = 7500, x = 1$						$H = 30, V_\infty = 7500, x = 27$					
0	0.000	3.24	0.844	0.376	2.48	0.0000	2.35	0.112	0.0336	3.51	
0.1	0.882	3.25	1.06	0.475	2.45	0.0715	2.15	0.118	0.0353	3.75	
0.2	1.54	3.20	1.27	0.567	2.49	0.153	1.90	0.132	0.0356	4.14	
0.3	2.06	3.11	1.53	0.666	2.58	0.235	1.56	0.155	0.0378	4.61	
0.4	2.55	2.98	1.75	0.763	2.71	0.311	1.18	0.193	0.0386	5.62	
0.5	2.97	2.84	2.04	0.864	2.86	0.375	0.750	0.262	0.0392	7.09	
0.6	3.36	2.66	2.39	0.972	3.05	0.434	0.351	0.438	0.0413	8.93	
0.7	3.72	2.42	2.83	1.10	3.25	0.501	0.211	0.760	0.0455	11.0	
0.8	4.05	2.14	3.52	1.24	3.58	0.577	0.134	1.35	0.0522	13.6	
0.9	4.35	1.78	4.83	1.46	4.08	0.663	0.097	2.33	0.0659	15.7	
1.0	4.60	1.40	7.33	1.79	4.80	0.774	0.095	3.50	0.0954	16.2	

Table 31 Continued

$\theta_b = 0^\circ$											
$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 30, V_\infty = 7500, x = 100$						$H = 30, V_\infty = 6000, x = 10$					
0	0.0000	2.05	0.048	0.0150	4.01	0.000	2.41	0.23	0.0895	3.18	
0.1	0.0372	1.74	0.051	0.0150	4.40	0.160	2.24	0.25	0.0885	3.51	
0.2	0.0683	1.40	0.068	0.0151	5.19	0.293	2.02	0.28	0.0885	3.90	
0.3	0.0965	0.981	0.097	0.0152	6.52	0.415	1.74	0.31	0.0890	4.34	
0.4	0.123	0.425	0.152	0.0153	8.78	0.525	1.40	0.36	0.0905	4.86	
0.5	0.148	0.150	0.318	0.0158	13.7	0.627	1.00	0.43	0.0930	5.62	
0.6	0.175	0.071	0.588	0.0173	18.4	0.720	0.675	0.57	0.0965	6.53	
0.7	0.210	0.060	0.934	0.0198	19.8	0.805	0.440	0.88	0.102	7.77	
0.8	0.256	0.050	1.39	0.0245	20.3	0.910	0.305	1.40	0.117	9.26	
0.9	0.310	0.051	2.00	0.0300	20.4	1.07	0.230	2.36	0.154	10.5	
1.0	0.388	0.061	2.87	0.0396	20.5	1.30	0.200	4.22	0.236	11.2	
$H = 30, V_\infty = 6000, x = 1$						$H = 30, V_\infty = 6000, x = 27$					
0	0.00	3.05	0.758	0.376	2.44	0.000	2.13	0.120	0.0410	3.63	
0.1	0.96	3.09	0.980	0.487	2.40	0.087	1.95	0.135	0.0409	4.02	
0.2	1.65	3.05	1.18	0.590	2.42	0.164	1.68	0.150	0.0410	4.50	
0.3	2.23	2.96	1.40	0.685	2.49	0.234	1.35	0.170	0.0414	5.05	
0.4	2.71	2.84	1.67	0.785	2.61	0.299	0.950	0.205	0.0420	5.75	
0.5	3.14	2.68	1.99	0.897	2.77	0.359	0.543	0.315	0.0431	7.08	
0.6	3.51	2.49	2.38	1.02	2.98	0.418	0.310	0.535	0.0454	9.13	
0.7	3.84	2.25	3.05	1.18	3.26	0.487	0.200	0.895	0.0508	11.2	
0.8	4.11	1.99	4.03	1.36	3.67	0.568	0.145	1.42	0.0609	12.9	
0.9	4.44	1.61	5.11	1.57	4.19	0.658	0.125	2.14	0.0770	14.1	
1.0	4.75	1.25	6.12	1.83	4.89	0.759	0.115	3.01	0.104	14.2	
$H = 30, V_\infty = 6000, x = 3.05$						$H = 30, V_\infty = 5000, x = 1$					
0	0.00	2.74	0.43	0.195	2.78	0.00	2.92	0.74	0.362	2.55	
0.1	0.13	2.67	0.44	0.194	2.85	0.95	2.98	0.97	0.485	2.46	
0.2	0.26	2.41	0.49	0.196	3.14	1.64	2.96	1.20	0.600	2.49	
0.3	0.41	2.16	0.54	0.200	3.42	2.22	2.87	1.44	0.712	2.58	
0.4	0.57	1.98	0.61	0.205	3.77	2.70	2.74	1.76	0.830	2.70	
0.5	0.74	1.73	0.69	0.213	4.18	3.12	2.59	2.10	0.959	2.82	
0.6	0.98	1.45	0.83	0.229	4.66	3.49	2.38	2.50	1.10	3.00	
0.7	1.30	1.14	1.15	0.273	5.18	3.86	2.14	3.11	1.28	3.28	
0.8	1.75	0.835	1.73	0.356	5.75	4.19	1.86	3.93	1.52	3.64	
0.9	2.14	0.650	2.93	0.480	6.43	4.49	1.57	5.23	1.82	4.05	
1.0	2.52	0.490	4.84	0.640	7.41	4.75	1.32	7.07	2.18	4.38	
$H = 30, V_\infty = 6000, x = 4.9$						$H = 30, V_\infty = 5000, x = 3.05$					
0	0.000	2.63	0.35	0.150	2.90	0.000	2.70	0.50	0.228	2.83	
0.1	0.155	2.44	0.38	0.150	3.08	0.170	2.52	0.53	0.228	3.05	
0.2	0.285	2.23	0.41	0.150	3.42	0.320	2.32	0.55	0.228	3.30	
0.3	0.407	1.98	0.46	0.150	3.83	0.457	2.10	0.58	0.227	3.56	
0.4	0.537	1.71	0.51	0.151	4.26	0.577	1.86	0.62	0.227	3.84	
0.5	0.680	1.40	0.59	0.153	4.81	0.769	1.61	0.68	0.228	4.15	
0.6	0.855	1.06	0.70	0.159	5.44	1.03	1.35	0.83	0.250	4.49	
0.7	1.05	0.780	0.92	0.171	6.08	1.42	1.08	1.13	0.301	4.87	
0.8	1.30	0.590	1.43	0.211	6.86	1.81	0.870	1.76	0.385	5.40	
0.9	1.61	0.433	2.62	0.301	7.85	2.17	0.686	2.90	0.522	6.07	
1.0	1.93	0.330	5.19	0.464	8.87	2.54	0.535	5.38	0.774	6.87	

Table 31 Continued

 $\theta_b = 0^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 30, V_\infty = 5000, x = 4.9$						$H = 30, V_\infty = 4000, x = 3.05$					
0	0.000	2.57	0.39	0.169	2.99	0.000	2.65	0.490	0.261	2.67	
0.1	0.198	2.38	0.40	0.169	3.23	0.235	2.49	0.500	0.260	2.81	
0.2	0.369	2.14	0.43	0.169	3.52	0.424	2.32	0.520	0.260	2.97	
0.3	0.521	1.88	0.46	0.168	3.78	0.599	2.09	0.553	0.261	3.17	
0.4	0.664	1.60	0.50	0.168	4.12	0.752	1.81	0.600	0.262	3.42	
0.5	0.790	1.30	0.58	0.169	4.55	0.918	1.52	0.680	0.264	3.72	
0.6	0.897	0.990	0.71	0.172	5.10	1.14	1.30	0.830	0.282	4.10	
0.7	1.04	0.740	0.96	0.183	5.83	1.49	1.10	1.17	0.340	4.54	
0.8	1.31	0.584	1.50	0.230	6.52	1.87	0.920	1.80	0.435	5.00	
0.9	1.61	0.459	2.51	0.321	7.32	2.23	0.760	2.96	0.585	5.57	
1.0	1.95	0.374	4.75	0.492	8.18	2.60	0.628	4.88	0.845	6.16	
$H = 30, V_\infty = 5000, x = 10$						$H = 30, V_\infty = 4000, x = 4.9$					
0	0.000	2.32	0.23	0.0945	3.18	0.000	2.47	0.360	0.183	2.85	
0.1	0.156	2.13	0.24	0.0945	3.54	0.218	2.32	0.370	0.183	2.98	
0.2	0.300	1.88	0.26	0.0952	3.83	0.403	2.12	0.390	0.184	3.16	
0.3	0.427	1.59	0.28	0.0967	4.15	0.581	1.82	0.430	0.186	3.43	
0.4	0.547	1.27	0.33	0.0991	4.62	0.734	1.53	0.499	0.188	3.78	
0.5	0.655	0.925	0.46	0.102	5.28	0.862	1.25	0.601	0.193	4.24	
0.6	0.752	0.638	0.66	0.108	6.28	0.985	1.00	0.775	0.202	4.82	
0.7	0.840	0.452	0.93	0.117	7.40	1.13	0.790	0.999	0.216	5.45	
0.8	0.927	0.325	1.43	0.130	8.69	1.35	0.630	1.50	0.258	6.10	
0.9	1.08	0.261	2.37	0.167	9.71	1.66	0.524	2.52	0.370	6.77	
1.0	1.31	0.237	3.79	0.256	10.1	2.00	0.457	4.26	0.548	7.25	
$H = 30, V_\infty = 5000, x = 27$						$H = 30, V_\infty = 4000, x = 10$					
0	0.000	2.05	0.125	0.0457	3.69	0.000	2.19	0.221	0.105	3.12	
0.1	0.087	1.83	0.125	0.0456	3.98	0.158	2.05	0.232	0.105	3.26	
0.2	0.156	1.55	0.140	0.0459	4.32	0.295	1.80	0.256	0.106	3.50	
0.3	0.221	1.22	0.182	0.0464	4.88	0.410	1.46	0.299	0.107	3.90	
0.4	0.279	0.840	0.256	0.0472	5.96	0.513	1.17	0.362	0.110	4.41	
0.5	0.338	0.459	0.383	0.0486	7.44	0.619	0.894	0.470	0.115	5.15	
0.6	0.399	0.303	0.620	0.0520	9.12	0.730	0.662	0.682	0.122	6.04	
0.7	0.464	0.214	1.00	0.0589	10.9	0.846	0.490	1.02	0.135	7.03	
0.8	0.554	0.160	1.52	0.0720	12.3	0.966	0.374	1.53	0.158	8.04	
0.9	0.650	0.155	2.06	0.0904	12.6	1.10	0.326	2.24	0.198	8.62	
1.0	0.755	0.155	2.64	0.117	12.5	1.33	0.307	3.35	0.293	8.86	
$H = 30, V_\infty = 4000, x = 1$						$H = 30, V_\infty = 4000, x = 27$					
0	0.00	2.95	0.786	0.460	2.34	0.000	1.87	0.120	0.0519	3.46	
0.1	1.01	3.03	1.02	0.599	2.29	0.073	1.70	0.143	0.0523	3.64	
0.2	1.71	3.02	1.22	0.720	2.29	0.135	1.42	0.169	0.0529	4.01	
0.3	2.29	2.96	1.45	0.846	2.34	0.191	1.02	0.200	0.0538	4.75	
0.4	2.79	2.83	1.62	0.979	2.44	0.242	0.687	0.291	0.0552	5.99	
0.5	3.22	2.64	2.02	1.11	2.60	0.290	0.455	0.482	0.0575	7.26	
0.6	3.60	2.41	2.40	1.25	2.80	0.350	0.307	0.750	0.0622	8.92	
0.7	3.94	2.16	2.92	1.43	3.02	0.426	0.230	1.12	0.0730	10.2	
0.8	4.26	1.91	3.63	1.66	3.26	0.528	0.214	1.47	0.0908	10.6	
0.9	4.54	1.68	4.67	1.94	3.55	0.641	0.215	1.83	0.113	10.6	
1.0	4.81	1.45	6.30	2.29	3.87	0.763	0.218	2.30	0.144	10.5	

Table 31 Continued

$\theta_b = 0^\circ$

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 30, V_\infty = 3000, x = 1$						$H = 30, V_\infty = 3000, x = 27$					
0	0.00	2.61	0.68	0.44	2.22	0.000	1.63	0.170	0.0725	3.4	
0.1	1.08	2.74	0.90	0.62	2.22	0.039	1.41	0.195	0.0725	3.7	
0.2	1.81	2.75	1.12	0.76	2.21	0.072	1.17	0.250	0.0725	4.0	
0.3	2.40	2.71	1.35	0.90	2.24	0.094	1.01	0.317	0.0730	5.0	
0.4	2.83	2.63	1.60	1.04	2.30	0.133	0.805	0.480	0.0747	6.3	
0.5	3.30	2.52	1.87	1.20	2.38	0.191	0.615	0.725	0.0803	7.8	
0.6	3.64	2.38	2.20	1.37	2.50	0.266	0.537	0.937	0.0900	8.5	
0.7	3.97	2.22	2.71	1.54	2.69	0.357	0.515	1.13	0.104	8.7	
0.8	4.25	2.02	3.35	1.76	2.92	0.462	0.515	1.34	0.123	8.7	
0.9	4.52	1.78	4.25	2.03	3.19	0.576	0.520	1.58	0.149	8.6	
1.0	4.77	1.56	5.26	2.37	3.46	0.719	0.530	1.88	0.184	8.4	
$H = 30, V_\infty = 3000, x = 3.05$						$H = 10, V_\infty = 5000, x = 1$					
0.0	0.00	2.28	0.45	0.260	2.64	0.000	2.81	0.732	0.378	2.5	
0.1	0.18	2.14	0.48	0.260	2.79	0.988	2.89	0.970	0.514	2.4	
0.2	0.34	1.97	0.51	0.262	2.96	1.67	2.87	1.19	0.630	2.6	
0.3	0.49	1.81	0.55	0.264	3.19	2.24	2.80	1.43	0.755	2.5	
0.4	0.63	1.66	0.61	0.266	3.39	2.71	2.69	1.71	0.874	2.6	
0.5	0.82	1.51	0.68	0.273	3.63	3.14	2.53	2.03	0.997	2.7	
0.6	1.04	1.38	0.85	0.303	3.88	3.51	2.34	2.42	1.15	2.9	
0.7	1.48	1.18	1.20	0.379	4.27	3.84	2.12	2.97	1.32	3.2	
0.8	1.88	1.00	1.79	0.497	4.66	4.16	1.87	3.84	1.55	3.5	
0.9	2.38	0.83	2.71	0.662	5.16	4.47	1.59	5.04	1.84	3.8	
1.0	2.61	0.78	4.18	0.919	5.37	4.77	1.33	6.96	2.20	4.26	
$H = 30, V_\infty = 3000, x = 4.9$						$H = 10, V_\infty = 5000, x = 3.05$					
0	0.00	2.11	0.35	0.193	2.82	0.000	2.57	0.486	0.231	2.82	
0.1	0.17	1.96	0.38	0.193	3.00	0.172	2.43	0.516	0.232	2.98	
0.2	0.33	1.78	0.42	0.194	3.23	0.340	2.24	0.534	0.231	3.18	
0.3	0.47	1.59	0.47	0.196	3.49	0.505	2.03	0.568	0.232	3.42	
0.4	0.60	1.38	0.53	0.200	3.78	0.677	1.81	0.610	0.232	3.66	
0.5	0.72	1.17	0.64	0.204	4.23	0.869	1.57	0.670	0.238	3.97	
0.6	0.85	0.993	0.79	0.210	4.71	1.09	1.32	0.820	0.257	4.30	
0.7	1.03	0.825	1.05	0.237	5.20	1.44	1.10	1.12	0.300	4.75	
0.8	1.34	0.715	1.60	0.309	5.63	1.83	0.878	1.73	0.387	5.38	
0.9	1.67	0.650	2.39	0.421	5.96	2.19	0.693	2.86	0.531	6.08	
1.0	1.92	0.600	3.55	0.605	6.20	2.56	0.540	5.43	0.787	6.82	
$H = 30, V_\infty = 3000, x = 10$											
0	0.000	1.86	0.245	0.119	3.11						
0.1	0.135	1.70	0.260	0.118	3.33						
0.2	0.250	1.52	0.290	0.118	3.62						
0.3	0.357	1.32	0.335	0.119	3.96						
0.4	0.450	1.10	0.400	0.122	4.39						
0.5	0.537	0.875	0.520	0.127	4.99						
0.6	0.615	0.700	0.700	0.136	5.70						
0.7	0.700	0.570	0.945	0.150	6.47						
0.8	0.800	0.490	1.25	0.172	6.94						
0.9	0.950	0.455	1.66	0.212	7.23						
1.0	1.17	0.440	2.25	0.285	7.33						

Table 31 Continued

 $\theta_b = 0^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 10, V_\infty = 5000, x = 4.9$						$H = 10, V_\infty = 3000, x = 3.05$					
0	0.000	2.42	0.370	0.168	2.99	0.000	2.22	0.45	0.257	2.69	
0.1	0.166	2.25	0.388	0.167	3.19	0.182	2.06	0.48	0.258	2.84	
0.2	0.345	2.04	0.420	0.167	3.42	0.340	1.94	0.52	0.258	3.02	
0.3	0.510	1.81	0.443	0.168	3.66	0.483	1.78	0.55	0.259	3.18	
0.4	0.665	1.55	0.497	0.170	3.96	0.620	1.61	0.60	0.262	3.39	
0.5	0.809	1.27	0.568	0.172	4.41	0.765	1.44	0.69	0.269	3.62	
0.6	0.952	0.992	0.700	0.178	4.96	1.03	1.25	0.86	0.293	3.91	
0.7	1.11	0.764	0.940	0.187	5.70	1.45	1.05	1.16	0.370	4.30	
0.8	1.33	0.595	1.48	0.232	6.49	1.89	0.920	1.72	0.487	4.70	
0.9	1.64	0.468	2.53	0.323	7.29	2.27	0.855	2.74	0.658	5.07	
1.0	1.97	0.377	4.80	0.501	8.15	2.60	0.767	4.20	0.910	5.41	
$H = 10, V_\infty = 5000, x = 10$						$H = 10, V_\infty = 3000, x = 4.9$					
0	0.000	2.17	0.227	0.0949	3.30	0.000	2.05	0.358	0.190	2.87	
0.1	0.157	1.99	0.240	0.0950	3.49	0.174	1.90	0.381	0.190	3.06	
0.2	0.300	1.78	0.260	0.0955	3.74	0.334	1.74	0.410	0.191	3.27	
0.3	0.421	1.54	0.289	0.0970	4.05	0.481	1.56	0.455	0.194	3.52	
0.4	0.537	1.26	0.331	0.0990	4.48	0.604	1.37	0.523	0.198	3.84	
0.5	0.645	0.932	0.433	0.102	5.19	0.725	1.17	0.622	0.204	4.27	
0.6	0.746	0.635	0.640	0.107	6.26	0.841	0.981	0.781	0.214	4.74	
0.7	0.846	0.462	0.945	0.117	7.39	1.04	0.817	1.04	0.239	5.24	
0.8	0.965	0.330	1.44	0.134	8.60	1.34	0.699	1.55	0.309	5.69	
0.9	1.11	0.269	2.23	0.166	9.60	1.67	0.627	2.38	0.427	6.05	
1.0	1.32	0.237	3.86	0.260	10.1	2.00	0.590	3.61	0.606	6.26	
$H = 10, V_\infty = 5000, x = 27$						$H = 10, V_\infty = 3000, x = 10$					
0	0.000	1.88	0.120	0.0454	3.69	0.000	1.81	0.246	0.117	3.17	
0.1	0.090	1.70	0.130	0.0454	3.91	0.127	1.64	0.266	0.117	3.46	
0.2	0.162	1.46	0.141	0.0457	4.23	0.237	1.45	0.299	0.118	3.70	
0.3	0.224	1.13	0.170	0.0461	4.72	0.342	1.24	0.350	0.120	4.04	
0.4	0.280	0.803	0.229	0.0469	5.58	0.434	1.03	0.442	0.124	4.57	
0.5	0.336	0.497	0.360	0.0485	7.15	0.534	0.807	0.580	0.131	5.27	
0.6	0.399	0.300	0.629	0.0518	9.24	0.635	0.623	0.800	0.142	6.09	
0.7	0.471	0.210	1.04	0.0581	11.0	0.735	0.507	1.08	0.158	6.76	
0.8	0.555	0.163	1.49	0.0703	12.2	0.861	0.452	1.44	0.185	7.27	
0.9	0.656	0.155	2.00	0.0907	12.5	1.07	0.432	2.00	0.244	7.48	
1.0	0.771	0.153	2.71	0.119	12.6	1.32	0.434	2.76	0.344	7.38	
$H = 10, V_\infty = 3000, x = 1$						$H = 10, V_\infty = 3000, x = 27$					
0	0.00	2.52	0.66	0.42	2.39	0.000	1.58	0.167	0.0705	3.49	
0.1	1.10	2.66	0.90	0.60	2.27	0.042	1.37	0.190	0.0707	3.81	
0.2	1.82	2.68	1.12	0.75	2.23	0.080	1.11	0.238	0.0711	4.42	
0.3	2.40	2.65	1.35	0.89	2.26	0.116	0.809	0.318	0.0723	5.35	
0.4	2.86	2.59	1.60	1.03	2.33	0.156	0.533	0.490	0.0750	6.60	
0.5	3.27	2.49	1.86	1.18	2.41	0.207	0.375	0.728	0.0800	7.89	
0.6	3.62	2.36	2.20	1.34	2.53	0.277	0.325	0.925	0.0895	8.59	
0.7	3.94	2.20	2.68	1.52	2.70	0.364	0.310	1.13	0.102	8.83	
0.8	4.24	2.00	3.34	1.74	2.91	0.469	0.309	1.37	0.121	8.87	
0.9	4.51	1.78	4.23	2.00	3.31	0.587	0.318	1.61	0.146	8.76	
1.0	4.75	1.59	5.53	2.34	3.48	0.726	0.333	1.97	0.182	8.52	

Table 31 Concluded

$\theta_b = 0^\circ$											
$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 30, V_\infty = 5000, \bar{R} = 0, x = 1.88$						$H = 30, V_\infty = 5000, \bar{R} = 0, x = 7.5$					
0	0.000	2.81	0.613	0.285	2.69	0.000	2.36	0.251	0.101	3.28	
0.1	0.111	2.69	0.628	0.284	2.82	0.182	2.26	0.250	0.102	3.42	
0.2	0.238	2.56	0.635	0.281	2.99	0.342	2.11	0.265	0.103	3.58	
0.3	0.371	2.42	0.660	0.280	3.17	0.475	1.94	0.280	0.105	3.78	
0.4	0.548	2.25	0.690	0.280	3.36	0.600	1.73	0.310	0.108	4.03	
0.5	0.743	2.09	0.720	0.284	3.54	0.725	1.46	0.343	0.112	4.46	
0.6	1.00	1.89	0.780	0.293	3.74	0.840	1.05	0.510	0.118	5.32	
0.7	1.32	1.63	0.975	0.322	4.05	0.930	0.540	0.880	0.126	6.82	
0.8	1.75	1.20	1.46	0.401	4.76	0.982	0.340	1.42	0.141	8.40	
0.9	2.24	0.738	2.70	0.537	5.70	1.08	0.269	2.26	0.170	9.68	
1.0	2.66	0.572	5.49	0.838	6.64	1.28	0.233	3.75	0.248	10.2	
$H = 30, V_\infty = 5000, \bar{R} = 0, x = 3.38$						$H = 30, V_\infty = 5000, \bar{R} = 0, x = 21.2$					
0	0.000	2.67	0.471	0.210	2.87	0.0000	2.07	0.131	0.0482	3.66	
0.1	0.223	2.54	0.480	0.208	3.02	0.0910	1.96	0.131	0.0481	3.80	
0.2	0.425	2.39	0.490	0.206	3.20	0.168	1.78	0.145	0.0484	4.00	
0.3	0.602	2.21	0.510	0.203	3.42	0.237	1.53	0.155	0.0488	4.28	
0.4	0.750	2.00	0.530	0.200	3.64	0.298	1.23	0.178	0.0493	4.72	
0.5	0.857	1.78	0.555	0.196	3.90	0.352	0.838	0.255	0.0503	5.58	
0.6	0.975	1.48	0.600	0.195	4.30	0.405	0.301	0.625	0.0526	9.02	
0.7	1.12	1.02	0.830	0.202	5.07	0.464	0.202	1.01	0.0583	11.0	
0.8	1.31	0.641	1.32	0.229	6.20	0.556	0.167	1.51	0.0705	12.2	
0.9	1.59	0.485	2.32	0.310	7.25	0.668	0.155	2.06	0.0926	12.5	
1.0	1.96	0.378	4.76	0.498	8.14	0.770	0.157	2.68	0.120	12.5	

Table 32

 $\theta_b = 2^\circ.5, \gamma = 1.4$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$
$M_\infty = \infty, x = 2$				$M_\infty = \infty, x = 52$				$M_\infty = 10, x = 10$	
0	0.437	1.87	0.294	0.437	0.893	0.0222	0.437	1.54	0.128
0.1	0.550	1.79	0.300	0.430	0.755	0.0222	0.462	1.41	0.129
0.2	0.655	1.70	0.295	0.430	0.620	0.0222	0.494	1.26	0.130
0.3	0.750	1.61	0.290	0.435	0.488	0.0223	0.540	1.08	0.133
0.4	0.920	1.52	0.305	0.443	0.366	0.0225	0.596	0.885	0.137
0.5	1.27	1.44	0.350	0.457	0.250	0.0226	0.665	0.714	0.145
0.6	1.75	1.34	0.420	0.473	0.160	0.0232	0.741	0.575	0.157
0.7	2.15	1.23	0.520	0.495	0.0950	0.0243	0.821	0.484	0.173
0.8	2.54	1.10	0.655	0.528	0.0600	0.0273	0.911	0.440	0.200
0.9	2.88	0.930	0.840	0.576	0.0420	0.0336	1.07	0.427	0.249
1.0	3.26	0.679	1.16	0.636	0.0282	0.0484	1.31	0.434	0.341
$M_\infty = \infty, x = 5$				$M_\infty = \infty, x = 100$				$M_\infty = 10, x = 27$	
0	0.437	1.56	0.158	0.437	0.780	0.0138	0.437	1.38	0.0868
0.1	0.560	1.47	0.212	0.418	0.643	0.0138	0.380	1.12	0.0870
0.2	0.675	1.36	0.234	0.403	0.508	0.0138	0.341	0.845	0.0872
0.3	0.780	1.25	0.256	0.394	0.354	0.0138	0.322	0.583	0.0880
0.4	0.880	1.11	0.278	0.390	0.218	0.0138	0.320	0.410	0.0897
0.5	0.990	0.975	0.298	0.383	0.131	0.0139	0.339	0.337	0.0940
0.6	1.09	0.810	0.319	0.388	0.0780	0.0142	0.379	0.322	0.102
0.7	1.17	0.660	0.334	0.398	0.0440	0.0150	0.443	0.315	0.115
0.8	1.39	0.515	0.378	0.413	0.0300	0.0165	0.530	0.314	0.133
0.9	1.70	0.390	0.440	0.436	0.0210	0.0195	0.621	0.318	0.155
1.0	2.00	0.270	0.463	0.468	0.0153	0.0262	0.716	0.333	0.180
$M_\infty = \infty, x = 10$				$M_\infty = 10, x = 2$				$M_\infty = 10, x = 52$	
0	0.437	1.31	0.0870	0.437	2.03	0.335	0.437	1.37	0.0835
0.1	0.509	1.23	0.0870	0.531	1.94	0.335	0.346	0.860	0.0834
0.2	0.575	1.12	0.0875	0.621	1.85	0.335	0.284	0.475	0.0832
0.3	0.645	1.00	0.0880	0.700	1.75	0.332	0.239	0.312	0.0826
0.4	0.721	0.870	0.0905	0.885	1.65	0.350	0.212	0.284	0.0820
0.5	0.815	0.710	0.0936	1.31	1.63	0.410	0.204	0.276	0.0836
0.6	0.896	0.555	0.0980	1.80	1.54	0.505	0.223	0.275	0.0882
0.7	0.983	0.419	0.105	2.17	1.42	0.626	0.271	0.280	0.0951
0.8	1.07	0.306	0.116	2.54	1.28	0.779	0.334	0.286	0.106
0.9	1.17	0.212	0.142	2.90	1.13	0.985	0.409	0.295	0.121
1.0	1.37	0.130	0.223	3.23	0.998	1.29	0.493	0.304	0.137
$M_\infty = \infty, x = 27$				$M_\infty = 10, x = 5$				$M_\infty = 10, x = 100$	
0	0.437	1.03	0.0373	0.437	1.75	0.199	0.437	1.40	0.0917
0.1	0.443	0.921	0.0373	0.525	1.64	0.199	0.349	0.437	0.0912
0.2	0.458	0.805	0.0374	0.618	1.51	0.201	0.278	0.246	0.0899
0.3	0.461	0.681	0.0376	0.705	1.37	0.203	0.225	0.260	0.0869
0.4	0.510	0.555	0.0380	0.794	1.22	0.210	0.180	0.262	0.0834
0.5	0.543	0.421	0.0390	0.877	1.04	0.216	0.146	0.264	0.0814
0.6	0.586	0.281	0.0404	0.950	0.886	0.225	0.141	0.264	0.0813
0.7	0.632	0.133	0.0432	1.10	0.755	0.250	0.160	0.265	0.0842
0.8	0.695	0.126	0.0483	1.38	0.672	0.316	0.205	0.265	0.0905
0.9	0.774	0.0750	0.0611	1.66	0.620	0.426	0.257	0.270	0.0993
1.0	0.863	0.0518	0.0888	1.96	0.582	0.590	0.322	0.284	0.110

Table 32 Concluded

 $\theta_b = 2^\circ.5, \gamma = 1.4$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$
$M_\infty = 6, x = 2$				$M_\infty = 6, x = 52$				$M_\infty = 4, x = 10$	
0	0.43	2.33	0.407	0.437	1.97	0.221	0.437	2.74	0.444
0.1	0.50	2.23	0.410	0.317	1.12	0.220	0.342	2.37	0.443
0.2	0.56	2.13	0.405	0.237	0.725	0.217	0.275	2.01	0.444
0.3	0.62	2.01	0.404	0.179	0.680	0.214	0.240	1.79	0.448
0.4	0.86	1.95	0.435	0.138	0.710	0.209	0.235	1.69	0.455
0.5	1.35	1.91	0.545	0.117	0.735	0.205	0.255	1.65	0.464
0.6	1.83	1.83	0.660	0.111	0.750	0.203	0.313	1.66	0.492
0.7	2.18	1.75	0.824	0.119	0.760	0.203	0.440	1.69	0.540
0.8	2.50	1.66	0.985	0.169	0.761	0.208	0.665	1.74	0.619
0.9	2.83	1.58	1.21	0.267	0.761	0.223	0.903	1.81	0.719
1.0	3.17	1.53	1.54	0.408	0.761	0.278	1.14	1.87	0.832
$M_\infty = 6, x = 5$				$M_\infty = 6, x = 100$				$M_\infty = 4, x = 27$	
0	0.437	2.09	0.282	0.437	1.97	0.227	0.437	2.78	0.468
0.1	0.480	1.94	0.282	0.342	1.58	0.226	0.337	2.20	0.451
0.2	0.525	1.77	0.284	0.261	1.24	0.223	0.213	1.61	0.451
0.3	0.575	1.59	0.289	0.199	0.960	0.220	0.141	1.59	0.451
0.4	0.630	1.41	0.296	0.156	0.765	0.217	0.113	1.58	0.450
0.5	0.695	1.23	0.306	0.129	0.680	0.215	0.107	1.58	0.450
0.6	0.768	1.12	0.325	0.114	0.665	0.214	0.109	1.58	0.450
0.7	1.02	1.07	0.388	0.108	0.674	0.213	0.137	1.58	0.453
0.8	1.32	1.06	0.497	0.107	0.700	0.214	0.243	1.59	0.477
0.9	1.59	1.08	0.628	0.146	0.730	0.222	0.383	1.64	0.516
1.0	1.88	1.10	0.786	0.255	0.740	0.245	0.581	1.71	0.618
$M_\infty = 6, x = 10$				$M_\infty = 4, x = 2$				$M_\infty = 4, x = 52$	
0	0.437	1.95	0.222	0.437	2.93	0.561	0.437	2.80	0.477
0.1	0.404	1.76	0.222	0.443	2.82	0.560	0.298	1.68	0.477
0.2	0.385	1.56	0.223	0.445	2.70	0.555	0.203	1.35	0.475
0.3	0.384	1.35	0.225	0.435	2.57	0.552	0.138	1.40	0.470
0.4	0.396	1.14	0.231	0.835	2.56	0.650	0.102	1.50	0.465
0.5	0.424	0.997	0.239	1.32	2.55	0.805	0.101	1.60	0.460
0.6	0.468	0.908	0.251	1.75	2.53	0.970	0.120	1.64	0.461
0.7	0.519	0.870	0.267	2.11	2.51	1.15	0.146	1.64	0.468
0.8	0.584	0.855	0.287	2.43	2.51	1.36	0.183	1.63	0.479
0.9	0.688	0.857	0.314	2.73	2.52	1.61	0.238	1.62	0.501
1.0	0.877	0.875	0.375	3.00	2.54	1.86	0.360	1.65	0.547
$M_\infty = 6, x = 27$				$M_\infty = 4, x = 5$					
0	0.437	1.92	0.208	0.437	2.78	0.469			
0.1	0.329	1.31	0.207	0.407	2.57	0.470			
0.2	0.250	0.996	0.206	0.395	2.36	0.475			
0.3	0.196	0.805	0.206	0.400	2.14	0.480			
0.4	0.174	0.740	0.206	0.415	1.97	0.490			
0.5	0.180	0.724	0.210	0.440	1.86	0.505			
0.6	0.213	0.730	0.220	0.580	1.83	0.550			
0.7	0.279	0.735	0.235	0.907	1.87	0.670			
0.8	0.375	0.750	0.258	1.22	1.93	0.807			
0.9	0.499	0.775	0.293	1.50	2.00	0.955			
1.0	0.628	0.809	0.335	1.77	2.08	1.12			

Table 33

 $\theta_b = 2^\circ.5$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$
$H = 30, V_\infty = 7500, x = 2$										
0	0.437	3.13	0.669	0.287	2.62	0.437	2.28	0.092	0.0307	3.69
0.1	0.595	2.97	0.690	0.287	2.79	0.416	1.76	0.110	0.0307	4.35
0.2	0.755	2.78	0.710	0.288	3.00	0.404	1.28	0.150	0.0307	5.47
0.3	0.910	2.58	0.750	0.289	3.22	0.400	0.715	0.210	0.0308	7.30
0.4	1.07	2.35	0.800	0.290	3.45	0.402	0.327	0.370	0.0312	9.80
0.5	1.27	2.16	0.860	0.302	3.68	0.408	0.150	0.765	0.0317	12.8
0.6	1.59	1.93	1.06	0.337	3.98	0.418	0.100	1.16	0.0336	15.5
0.7	2.01	1.64	1.53	0.414	4.42	0.438	0.080	1.53	0.0372	17.2
0.8	2.39	1.30	2.34	0.527	5.18	0.471	0.075	1.95	0.0429	18.1
0.9	2.77	0.925	4.00	0.722	6.15	0.518	0.075	2.38	0.0509	18.3
1.0	3.15	0.641	7.25	1.06	7.01	0.572	0.076	2.86	0.0623	18.0
$H = 30, V_\infty = 7500, x = 52$										
0	0.437	2.86	0.37	0.148	2.95	0.437	2.21	0.075	0.0244	3.80
0.1	0.525	2.65	0.39	0.148	3.19	0.397	1.44	0.050	0.0244	5.35
0.2	0.625	2.41	0.42	0.150	3.47	0.361	0.730	0.200	0.0244	7.70
0.3	0.733	2.14	0.46	0.153	3.76	0.339	0.230	0.460	0.0245	11.3
0.4	0.840	1.85	0.52	0.157	4.26	0.323	0.110	0.770	0.0246	14.6
0.5	0.950	1.52	0.64	0.162	4.95	0.311	0.090	1.04	0.0249	17.1
0.6	1.07	1.13	0.87	0.172	5.76	0.305	0.067	1.30	0.0257	18.9
0.7	1.20	0.825	1.14	0.184	6.64	0.310	0.065	1.54	0.0271	20.2
0.8	1.37	0.560	1.61	0.205	7.59	0.324	0.063	1.76	0.0293	20.6
0.9	1.59	0.380	2.84	0.275	8.58	0.345	0.061	1.96	0.0325	20.7
1.0	1.88	0.286	5.65	0.428	9.75	0.379	0.059	2.16	0.0365	20.5
$H = 30, V_\infty = 7500, x = 100$										
0	0.437	2.86	0.37	0.148	2.95	0.437	2.21	0.075	0.0244	3.80
0.1	0.525	2.65	0.39	0.148	3.19	0.397	1.44	0.050	0.0244	5.35
0.2	0.625	2.41	0.42	0.150	3.47	0.361	0.730	0.200	0.0244	7.70
0.3	0.733	2.14	0.46	0.153	3.76	0.339	0.230	0.460	0.0245	11.3
0.4	0.840	1.85	0.52	0.157	4.26	0.323	0.110	0.770	0.0246	14.6
0.5	0.950	1.52	0.64	0.162	4.95	0.311	0.090	1.04	0.0249	17.1
0.6	1.07	1.13	0.87	0.172	5.76	0.305	0.067	1.30	0.0257	18.9
0.7	1.20	0.825	1.14	0.184	6.64	0.310	0.065	1.54	0.0271	20.2
0.8	1.37	0.560	1.61	0.205	7.59	0.324	0.063	1.76	0.0293	20.6
0.9	1.59	0.380	2.84	0.275	8.58	0.345	0.061	1.96	0.0325	20.7
1.0	1.88	0.286	5.65	0.428	9.75	0.379	0.059	2.16	0.0365	20.5
$H = 30, V_\infty = 7500, x = 10$										
0	0.437	2.68	0.24	0.0934	3.17	0.437	2.90	0.58	0.278	2.61
0.1	0.507	2.42	0.26	0.0935	3.40	0.586	2.76	0.60	0.277	2.73
0.2	0.573	2.14	0.28	0.0937	3.77	0.724	2.60	0.65	0.281	2.89
0.3	0.640	1.79	0.32	0.0942	4.30	0.858	2.43	0.72	0.289	3.10
0.4	0.700	1.42	0.40	0.0952	4.93	0.979	2.25	0.81	0.298	3.39
0.5	0.765	1.05	0.52	0.0970	5.85	1.16	2.05	0.92	0.315	3.69
0.6	0.830	0.675	0.70	0.105	7.03	1.57	1.81	1.18	0.370	4.02
0.7	0.913	0.410	1.07	0.108	8.35	2.00	1.55	1.65	0.463	4.47
0.8	1.01	0.290	1.67	0.125	9.70	2.41	1.25	2.36	0.589	4.99
0.9	1.13	0.220	2.71	0.155	11.0	2.81	0.950	3.55	0.770	5.53
1.0	1.28	0.166	4.70	0.217	12.4	3.19	0.699	6.45	1.11	6.25
$H = 30, V_\infty = 7500, x = 27$										
0	0.437	2.42	0.13	0.0457	3.51	0.437	2.67	0.380	0.166	2.85
0.1	0.440	2.10	0.14	0.0458	3.85	0.514	2.46	0.400	0.166	3.06
0.2	0.452	1.70	0.17	0.0458	4.50	0.609	2.21	0.445	0.166	3.32
0.3	0.469	1.26	0.22	0.0460	5.47	0.706	1.94	0.509	0.167	3.82
0.4	0.495	0.800	0.30	0.0465	6.75	0.812	1.64	0.580	0.168	4.36
0.5	0.527	0.433	0.45	0.0474	8.47	0.916	1.33	0.670	0.170	4.93
0.6	0.561	0.245	0.76	0.0497	10.3	1.04	0.990	0.804	0.177	5.56
0.7	0.603	0.160	1.23	0.0542	12.7	1.18	0.710	1.08	0.190	6.30
0.8	0.654	0.120	1.83	0.0627	14.4	1.35	0.530	1.65	0.220	7.12
0.9	0.715	0.100	2.61	0.0754	15.5	1.64	0.395	2.96	0.306	8.05
1.0	0.792	0.097	3.55	0.0990	16.0	1.90	0.325	5.15	0.455	8.93
$H = 30, V_\infty = 6000, x = 5$										
0	0.437	2.42	0.13	0.0457	3.51	0.437	2.67	0.380	0.166	2.85
0.1	0.440	2.10	0.14	0.0458	3.85	0.514	2.46	0.400	0.166	3.06
0.2	0.452	1.70	0.17	0.0458	4.50	0.609	2.21	0.445	0.166	3.32
0.3	0.469	1.26	0.22	0.0460	5.47	0.706	1.94	0.509	0.167	3.82
0.4	0.495	0.800	0.30	0.0465	6.75	0.812	1.64	0.580	0.168	4.36
0.5	0.527	0.433	0.45	0.0474	8.47	0.916	1.33	0.670	0.170	4.93
0.6	0.561	0.245	0.76	0.0497	10.3	1.04	0.990	0.804	0.177	5.56
0.7	0.603	0.160	1.23	0.0542	12.7	1.18	0.710	1.08	0.190	6.30
0.8	0.654	0.120	1.83	0.0627	14.4	1.35	0.530	1.65	0.220	7.12
0.9	0.715	0.100	2.61	0.0754	15.5	1.64	0.395	2.96	0.306	8.05
1.0	0.792	0.097	3.55	0.0990	16.0	1.90	0.325	5.15	0.455	8.93

Table 33 Continued

$\theta_b = 2^\circ.5$											
$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 30, V_\infty = 6000, x = 10$						$H = 30, V_\infty = 5000, x = 2$					
0	0.437	2.45	0.249	0.0996	3.10	0.437	2.86	0.66	0.317	2.63	
0.1	0.500	2.21	0.280	0.0996	3.48	0.588	2.60	0.70	0.315	2.95	
0.2	0.565	1.94	0.322	0.0998	3.93	0.703	2.40	0.76	0.316	3.17	
0.3	0.643	1.63	0.360	0.100	4.44	0.810	2.18	0.81	0.318	3.40	
0.4	0.722	1.27	0.421	0.103	5.09	0.950	2.05	0.83	0.325	3.53	
0.5	0.795	0.905	0.521	0.106	5.85	1.34	1.87	1.04	0.365	3.76	
0.6	0.865	0.556	0.730	0.111	6.79	1.75	1.63	1.37	0.438	4.03	
0.7	0.929	0.441	1.07	0.118	7.92	2.15	1.38	1.85	0.546	4.36	
0.8	1.00	0.303	1.62	0.132	9.26	2.54	1.15	2.55	0.682	4.76	
0.9	1.12	0.234	2.63	0.165	10.5	2.93	0.937	3.78	0.877	5.22	
1.0	1.29	0.198	4.21	0.236	11.2	3.24	0.761	5.97	1.17	5.75	
$H = 30, V_\infty = 6000, x = 27$						$H = 30, V_\infty = 5000, x = 5$					
0	0.437	2.20	0.143	0.0501	3.49	0.437	2.65	0.453	0.200	2.90	
0.1	0.433	1.88	0.150	0.0500	4.02	0.576	2.40	0.458	0.196	3.23	
0.2	0.442	1.50	0.183	0.0501	4.76	0.709	2.14	0.473	0.187	3.57	
0.3	0.455	1.06	0.240	0.0503	5.70	0.833	1.84	0.505	0.183	3.92	
0.4	0.484	0.654	0.322	0.0508	7.00	0.936	1.54	0.580	0.185	4.26	
0.5	0.510	0.348	0.550	0.0526	8.54	1.03	1.19	0.690	0.188	4.67	
0.6	0.540	0.232	0.853	0.0553	10.2	1.10	0.890	0.880	0.196	5.25	
0.7	0.582	0.172	1.26	0.0616	11.9	1.18	0.674	1.14	0.208	6.06	
0.8	0.640	0.140	1.81	0.0720	13.4	1.39	0.551	1.62	0.242	6.78	
0.9	0.709	0.119	2.42	0.0875	14.1	1.65	0.453	2.71	0.335	7.54	
1.0	0.784	0.124	3.07	0.109	14.1	1.95	0.374	4.75	0.492	8.17	
$H = 30, V_\infty = 6000, x = 52$						$H = 30, V_\infty = 5000, x = 10$					
0	0.437	2.03	0.10	0.0354	3.73	0.437	2.38	0.265	0.107	3.25	
0.1	0.406	1.58	0.13	0.0352	4.63	0.492	2.13	0.283	0.107	3.54	
0.2	0.387	1.07	0.17	0.0356	5.75	0.560	1.84	0.310	0.108	3.90	
0.3	0.379	0.490	0.27	0.0358	7.15	0.635	1.52	0.330	0.109	4.25	
0.4	0.375	0.255	0.54	0.0362	10.5	0.714	1.17	0.400	0.111	4.72	
0.5	0.377	0.150	0.83	0.0376	12.6	0.819	0.807	0.560	0.116	5.46	
0.6	0.390	0.110	1.16	0.0398	14.4	0.927	0.590	0.830	0.125	6.51	
0.7	0.414	0.095	1.47	0.0442	15.5	0.976	0.431	1.17	0.137	7.91	
0.8	0.451	0.090	1.78	0.0508	15.9	1.03	0.320	1.68	0.152	8.97	
0.9	0.499	0.090	2.13	0.0598	15.0	1.14	0.260	2.49	0.183	9.69	
1.0	0.565	0.101	2.47	0.0720	15.5	1.32	0.239	3.82	0.259	10.1	
$H = 30, V_\infty = 6000, x = 100$						$H = 30, V_\infty = 5000, x = 27$					
0.	0.437	2.03	0.095	0.0306	3.83	0.437	2.13	0.15	0.0564	3.58	
0.1	0.394	1.36	0.150	0.0305	5.30	0.437	1.76	0.16	0.0563	4.0-	
0.2	0.356	0.710	0.320	0.0305	7.70	0.443	1.34	0.19	0.0565	4.6-	
0.3	0.325	0.200	0.555	0.0305	10.7	0.453	0.930	0.24	0.0569	5.31	
0.4	0.301	0.115	0.825	0.0304	14.2	0.471	0.527	0.35	0.0580	6.53	
0.5	0.283	0.100	1.16	0.0305	16.4	0.494	0.323	0.55	0.0600	8.4-	
0.6	0.273	0.090	1.29	0.0311	17.1	0.522	0.233	0.82	0.0638	10.0	
0.7	0.272	0.080	1.30	0.0320	17.0	0.564	0.185	1.25	0.0705	11.4	
0.8	0.280	0.080	1.36	0.0336	17.1	0.624	0.166	1.82	0.0829	12.4	
0.9	0.296	0.080	1.55	0.0359	17.4	0.716	0.160	2.34	0.100	12.6	
1.0	0.318	0.080	1.68	0.0390	17.5	0.795	0.160	2.74	0.125	12.3	

Table 33 Continued

 $\theta_b = 2^\circ.5$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$
$H = 30, V_\infty = 5000, x = 52$										
0	0.437	2.02	0.116	0.0418	3.73	0.437	1.97	0.145	0.0644	3.36
0.1	0.399	1.46	0.122	0.0419	4.40	0.416	1.69	0.161	0.0640	3.78
0.2	0.372	0.880	0.230	0.0419	5.80	0.401	1.22	0.209	0.0645	4.38
0.3	0.353	0.399	0.410	0.0422	7.98	0.401	0.780	0.300	0.0656	5.49
0.4	0.343	0.218	0.650	0.0426	10.8	0.418	0.506	0.473	0.0675	6.85
0.5	0.345	0.155	0.955	0.0444	12.8	0.442	0.350	0.720	0.0709	8.27
0.6	0.364	0.135	1.25	0.0481	13.7	0.477	0.262	1.03	0.0770	9.65
0.7	0.396	0.125	1.52	0.0534	14.0	0.528	0.222	1.35	0.0865	10.4
0.8	0.440	0.125	1.76	0.0609	14.0	0.602	0.207	1.69	0.101	10.7
0.9	0.495	0.125	1.98	0.0715	13.8	0.703	0.216	2.05	0.124	10.5
1.0	0.563	0.134	2.19	0.0847	13.5	0.795	0.222	2.36	0.150	10.4
$H = 30, V_\infty = 4000, x = 27$										
0	0.437	2.85	0.678	0.379	2.47	0.437	1.89	0.125	0.0541	3.44
0.1	0.585	2.72	0.700	0.377	2.59	0.377	1.26	0.268	0.0540	4.27
0.2	0.730	2.54	0.720	0.377	2.77	0.331	0.625	0.445	0.0541	6.27
0.3	0.876	2.34	0.753	0.377	2.92	0.295	0.290	0.650	0.0544	9.06
0.4	1.01	2.10	0.800	0.372	3.14	0.281	0.220	0.851	0.0552	10.3
0.5	1.24	1.87	0.910	0.400	3.37	0.280	0.185	1.02	0.0568	11.2
0.6	1.74	1.67	1.12	0.475	3.57	0.304	0.179	1.17	0.0612	11.7
0.7	2.17	1.44	1.53	0.582	3.86	0.345	0.178	1.32	0.0679	11.7
0.8	2.58	1.25	2.19	0.720	4.21	0.413	0.180	1.47	0.0773	11.5
0.9	2.94	1.04	3.38	0.911	4.68	0.487	0.185	1.66	0.0882	11.4
1.0	3.29	0.858	5.43	1.24	5.23	0.552	0.193	1.90	0.105	11.2
$H = 30, V_\infty = 4000, x = 2$										
0	0.437	2.85	0.408	0.212	2.47	0.437	1.89	0.125	0.0541	3.44
0.1	0.557	2.34	0.409	0.205	2.94	0.560	2.37	0.62	0.375	2.58
0.2	0.687	2.09	0.430	0.203	3.18	0.710	2.21	0.67	0.375	2.70
0.3	0.817	1.80	0.473	0.205	3.48	0.840	2.05	0.72	0.380	2.89
0.4	0.938	1.47	0.564	0.210	3.88	0.980	1.90	0.78	0.385	3.05
0.5	1.05	1.18	0.699	0.216	4.36	1.31	1.80	0.92	0.435	3.19
0.6	1.16	0.958	0.880	0.226	4.88	1.77	1.66	1.17	0.525	3.37
0.7	1.26	0.757	1.17	0.242	5.58	2.18	1.51	1.59	0.637	3.60
0.8	1.41	0.595	1.64	0.273	6.29	2.58	1.34	2.20	0.795	3.91
0.9	1.68	0.510	2.63	0.370	6.83	2.95	1.16	3.11	1.00	4.26
1.0	1.98	0.451	4.23	0.537	7.30	3.29	1.01	4.71	1.32	4.62
$H = 30, V_\infty = 4000, x = 5$										
0	0.437	2.54	0.408	0.212	2.77	0.437	2.50	0.59	0.375	2.49
0.1	0.557	2.34	0.409	0.205	2.94	0.560	2.37	0.62	0.375	2.58
0.2	0.687	2.09	0.430	0.203	3.18	0.710	2.21	0.67	0.375	2.70
0.3	0.817	1.80	0.473	0.205	3.48	0.840	2.05	0.72	0.380	2.89
0.4	0.938	1.47	0.564	0.210	3.88	0.980	1.90	0.78	0.385	3.05
0.5	1.05	1.18	0.699	0.216	4.36	1.31	1.80	0.92	0.435	3.19
0.6	1.16	0.958	0.880	0.226	4.88	1.77	1.66	1.17	0.525	3.37
0.7	1.26	0.757	1.17	0.242	5.58	2.18	1.51	1.59	0.637	3.60
0.8	1.41	0.595	1.64	0.273	6.29	2.58	1.34	2.20	0.795	3.91
0.9	1.68	0.510	2.63	0.370	6.83	2.95	1.16	3.11	1.00	4.26
1.0	1.98	0.451	4.23	0.537	7.30	3.29	1.01	4.71	1.32	4.62
$H = 30, V_\infty = 3000, x = 2$										
0	0.437	2.54	0.408	0.212	2.77	0.437	2.50	0.59	0.375	2.49
0.1	0.557	2.34	0.409	0.205	2.94	0.560	2.37	0.62	0.375	2.58
0.2	0.687	2.09	0.430	0.203	3.18	0.710	2.21	0.67	0.375	2.70
0.3	0.817	1.80	0.473	0.205	3.48	0.840	2.05	0.72	0.380	2.89
0.4	0.938	1.47	0.564	0.210	3.88	0.980	1.90	0.78	0.385	3.05
0.5	1.05	1.18	0.699	0.216	4.36	1.31	1.80	0.92	0.435	3.19
0.6	1.16	0.958	0.880	0.226	4.88	1.77	1.66	1.17	0.525	3.37
0.7	1.26	0.757	1.17	0.242	5.58	2.18	1.51	1.59	0.637	3.60
0.8	1.41	0.595	1.64	0.273	6.29	2.58	1.34	2.20	0.795	3.91
0.9	1.68	0.510	2.63	0.370	6.83	2.95	1.16	3.11	1.00	4.26
1.0	1.98	0.451	4.23	0.537	7.30	3.29	1.01	4.71	1.32	4.62
$H = 30, V_\infty = 3000, x = 5$										
0	0.437	2.25	0.247	0.119	3.06	0.437	2.16	0.38	0.212	2.76
0.1	0.500	2.07	0.252	0.119	3.23	0.535	1.92	0.41	0.212	2.98
0.2	0.575	1.70	0.299	0.121	3.57	0.640	1.78	0.45	0.214	3.22
0.3	0.647	1.36	0.360	0.123	4.02	0.740	1.57	0.51	0.217	3.49
0.4	0.720	1.06	0.448	0.126	4.60	0.837	1.36	0.60	0.222	3.83
0.5	0.795	0.817	0.590	0.131	5.33	0.940	1.12	0.76	0.232	4.28
0.6	0.875	0.602	0.851	0.140	6.34	1.06	0.910	0.97	0.246	4.91
0.7	0.956	0.454	1.24	0.153	7.27	1.22	0.780	1.26	0.268	5.38
0.8	1.05	0.366	1.79	0.179	8.09	1.41	0.680	1.76	0.323	5.77
0.9	1.15	0.315	2.43	0.215	8.71	1.69	0.615	2.56	0.436	6.11
1.0	1.33	0.307	3.35	0.293	8.86	1.97	0.594	3.55	0.600	6.23

Table 33 Concluded

 $\theta_b = 2^\circ.5$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\xi$
$H = 30, V_\infty = 3000, x = 10$										
0	0.437	1.92	0.268	0.134	3.03	0.437	1.70	0.189	0.0855	3.31
0.1	0.492	1.70	0.300	0.135	3.33	0.347	0.980	0.370	0.0854	5.04
0.2	0.547	1.47	0.350	0.135	3.69	0.282	0.465	0.615	0.0849	7.17
0.3	0.601	1.23	0.410	0.136	4.13	0.238	0.320	0.845	0.0844	8.70
0.4	0.652	0.985	0.525	0.140	4.70	0.212	0.295	0.980	0.0846	9.19
0.5	0.708	0.780	0.725	0.149	5.39	0.204	0.283	1.06	0.0859	9.35
0.6	0.772	0.620	0.980	0.162	6.14	0.221	0.278	1.13	0.0902	9.38
0.7	0.855	0.510	1.26	0.181	6.81	0.269	0.283	1.21	0.0982	9.32
0.8	0.958	0.450	1.63	0.211	7.19	0.336	0.290	1.29	0.109	9.04
0.9	1.09	0.437	2.12	0.258	7.34	0.417	0.305	1.38	0.125	8.80
1.0	1.32	0.443	2.73	0.346	7.31	0.501	0.312	1.58	0.142	8.82
$H = 30, V_\infty = 3000, x = 27$										
0	0.437	1.72	0.196	0.0895	3.29	0.437	1.75	0.203	0.0939	3.26
0.1	0.382	1.31	0.245	0.0895	3.95	0.353	0.695	0.770	0.0933	6.95
0.2	0.341	0.945	0.345	0.0895	4.80	0.277	0.295	1.15	0.0913	9.22
0.3	0.318	0.630	0.513	0.0900	6.13	0.219	0.283	1.13	0.0884	9.34
0.4	0.310	0.437	0.730	0.0910	7.39	0.178	0.280	1.09	0.0859	9.44
0.5	0.331	0.360	0.915	0.0965	8.20	0.144	0.276	1.06	0.0837	9.42
0.6	0.380	0.325	1.08	0.106	8.70	0.134	0.275	1.06	0.0833	9.50
0.7	0.452	0.313	1.27	0.120	8.77	0.159	0.272	1.10	0.0869	9.54
0.8	0.538	0.315	1.42	0.137	8.72	0.201	0.270	1.20	0.0937	9.52
0.9	0.639	0.325	1.68	0.160	8.57	0.259	0.280	1.29	0.103	9.40
1.0	0.738	0.344	1.90	0.188	8.38	0.329	0.292	1.36	0.117	9.14

Table 34

 $\theta_b = 5^\circ, \gamma = 1.4$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$
$M_\infty = \infty, x = 4.9$				$M_\infty = \infty, x = 53$				$M_\infty = 23, x = 19.4$	
0	0.875	1.63	0.185	0.875	1.07	0.0425	0.875	1.28	0.0774
0.1	0.940	1.52	0.185	0.836	0.865	0.0425	0.836	1.13	0.0774
0.2	1.01	1.41	0.186	0.794	0.630	0.0424	0.808	0.963	0.0774
0.3	1.08	1.28	0.188	0.768	0.455	0.0424	0.790	0.770	0.0776
0.4	1.15	1.14	0.191	0.740	0.290	0.0424	0.781	0.583	0.0781
0.5	1.23	0.980	0.196	0.713	0.180	0.0424	0.788	0.423	0.0800
0.6	1.30	0.815	0.202	0.693	0.110	0.0425	0.796	0.303	0.0830
0.7	1.38	0.655	0.211	0.678	0.0650	0.0432	0.823	0.218	0.0888
0.8	1.49	0.515	0.232	0.668	0.0500	0.0450	0.869	0.166	0.0997
0.9	1.75	0.390	0.310	0.666	0.0400	0.0480	0.934	0.140	0.118
1.0	2.01	0.274	0.471	0.681	0.0324	0.0555	1.01	0.132	0.149
$M_\infty = \infty, x = 6.4$				$M_\infty = \infty, x = 150$				$M_\infty = 23, x = 28.5$	
0	0.875	1.54	0.150	0.875	1.29	0.0819	0.875	1.23	0.0660
0.1	0.920	1.43	0.150	0.858	0.810	0.0819	0.825	1.03	0.0659
0.2	0.970	1.31	0.151	0.838	0.345	0.0818	0.784	0.821	0.0658
0.3	1.02	1.18	0.152	0.819	0.125	0.0815	0.754	0.608	0.0658
0.4	1.09	1.03	0.155	0.801	0.0700	0.0806	0.730	0.412	0.0660
0.5	1.15	0.865	0.159	0.785	0.0450	0.0787	0.713	0.275	0.0664
0.6	1.22	0.705	0.165	0.766	0.0350	0.0753	0.708	0.191	0.0680
0.7	1.30	0.550	0.175	0.745	0.0250	0.0706	0.715	0.147	0.0720
0.8	1.37	0.410	0.190	0.723	0.0250	0.0650	0.740	0.125	0.0799
0.9	1.51	0.295	0.235	0.700	0.0250	0.0595	0.789	0.110	0.0928
1.0	1.74	0.208	0.357	0.674	0.0317	0.0543	0.848	0.110	0.112
$M_\infty = \infty, x = 16$				$M_\infty = 23, x = 1.2$				$M_\infty = 23, x = 32.4$	
0	0.875	1.26	0.0753	0.875	2.11	0.437	0.875	1.21	0.0633
0.1	0.856	1.14	0.0753	0.925	2.03	0.439	0.822	1.00	0.0632
0.2	0.847	1.00	0.0754	1.06	1.98	0.447	0.781	0.772	0.0632
0.3	0.848	0.850	0.0758	1.62	2.02	0.563	0.747	0.540	0.0632
0.4	0.855	0.690	0.0766	2.18	2.02	0.685	0.717	0.357	0.0632
0.5	0.871	0.525	0.0778	2.63	1.99	0.809	0.695	0.237	0.0635
0.6	0.893	0.390	0.0805	3.01	1.90	0.945	0.683	0.163	0.0649
0.7	0.930	0.275	0.0854	3.36	1.75	1.10	0.685	0.131	0.0680
0.8	0.979	0.190	0.0948	3.68	1.58	1.29	0.704	0.113	0.0746
0.9	1.04	0.125	0.113	3.99	1.36	1.54	0.743	0.104	0.0858
1.0	1.12	0.088	0.151	4.26	1.14	1.89	0.797	0.105	0.102
$M_\infty = \infty, x = 27$				$M_\infty = 23, x = 6.4$				$M_\infty = 23, x = 150$	
0	0.875	1.16	0.0555	0.875	1.58	0.159	0.875	1.36	0.0947
0.1	0.839	0.990	0.0555	0.912	1.51	0.159	0.850	0.398	0.0947
0.2	0.814	0.855	0.0554	0.950	1.35	0.160	0.825	0.160	0.0941
0.3	0.795	0.660	0.0552	1.00	1.19	0.163	0.800	0.0990	0.0931
0.4	0.784	0.500	0.0552	1.06	1.03	0.165	0.774	0.0980	0.0914
0.5	0.778	0.345	0.0556	1.12	0.875	0.170	0.749	0.0875	0.0890
0.6	0.778	0.235	0.0564	1.19	0.710	0.178	0.722	0.0870	0.0861
0.7	0.787	0.160	0.0586	1.27	0.556	0.189	0.693	0.0843	0.0824
0.8	0.807	0.105	0.0634	1.37	0.426	0.203	0.660	0.0831	0.0777
0.9	0.847	0.095	0.0750	1.51	0.335	0.260	0.620	0.0827	0.0717
1.0	0.903	0.056	0.0972	1.74	0.270	0.385	0.563	0.0814	0.0635

Table 34 Continued

 $\theta_b = 5^\circ, \gamma = 1.4$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$
$M_\infty = 15, x = 5$				$M_\infty = 15, x = 53$				$M_\infty = 10, x = 16$	
0	0.875	1.72	0.204	0.875	1.34	0.0858	0.875	1.56	0.134
0.1	0.913	1.60	0.204	0.800	0.795	0.0858	0.804	1.32	0.134
0.2	0.973	1.47	0.206	0.733	0.422	0.0852	0.748	1.07	0.134
0.3	1.04	1.33	0.208	0.670	0.240	0.0838	0.707	0.790	0.135
0.4	1.10	1.18	0.211	0.615	0.187	0.0816	0.687	0.598	0.137
0.5	1.17	1.00	0.217	0.570	0.165	0.0791	0.690	0.475	0.142
0.6	1.24	0.829	0.227	0.535	0.158	0.0777	0.713	0.414	0.150
0.7	1.29	0.677	0.239	0.516	0.158	0.0777	0.759	0.384	0.165
0.8	1.45	0.561	0.270	0.520	0.158	0.0810	0.823	0.369	0.186
0.9	1.71	0.475	0.365	0.546	0.158	0.0872	0.901	0.368	0.212
1.0	1.99	0.413	0.525	0.584	0.158	0.0962	0.994	0.375	0.246
$M_\infty = 15, x = 7$				$M_\infty = 15, x = 150$				$M_\infty = 10, x = 27$	
0	0.875	1.61	0.161	0.875	1.46	0.115	0.875	1.54	0.126
0.1	0.899	1.44	0.162	0.841	0.322	0.115	0.777	1.11	0.126
0.2	0.923	1.34	0.162	0.806	0.146	0.114	0.696	0.762	0.126
0.3	0.961	1.18	0.164	0.774	0.196	0.113	0.636	0.497	0.125
0.4	1.01	1.01	0.167	0.743	0.169	0.111	0.586	0.384	0.124
0.5	1.06	0.835	0.173	0.710	0.156	0.108	0.554	0.342	0.125
0.6	1.12	0.677	0.183	0.674	0.157	0.105	0.550	0.326	0.129
0.7	1.19	0.536	0.197	0.635	0.155	0.101	0.574	0.322	0.137
0.8	1.25	0.430	0.218	0.593	0.150	0.0959	0.621	0.325	0.150
0.9	1.41	0.365	0.270	0.536	0.147	0.0880	0.690	0.331	0.168
1.0	1.65	0.331	0.385	0.408	0.141	0.0708	0.762	0.339	0.190
$M_\infty = 15, x = 16$				$M_\infty = 10, x = 5$				$M_\infty = 10, x = 53$	
0	0.875	1.40	0.100	0.875	1.83	0.231	0.875	1.59	0.141
0.1	0.828	1.22	0.100	0.906	1.69	0.232	0.783	0.755	0.141
0.2	0.798	1.03	0.100	0.944	1.54	0.234	0.700	0.355	0.138
0.3	0.780	0.839	0.100	0.991	1.39	0.236	0.621	0.330	0.134
0.4	0.774	0.640	0.102	1.04	1.21	0.241	0.548	0.310	0.128
0.5	0.781	0.465	0.104	1.10	1.04	0.250	0.481	0.300	0.122
0.6	0.803	0.350	0.110	1.16	0.885	0.259	0.433	0.300	0.118
0.7	0.844	0.284	0.121	1.23	0.746	0.276	0.416	0.297	0.117
0.8	0.905	0.247	0.138	1.42	0.640	0.331	0.434	0.298	0.122
0.9	0.978	0.230	0.163	1.71	0.596	0.438	0.470	0.300	0.133
1.0	1.06	0.219	0.195	1.96	0.582	0.590	0.515	0.306	0.141
$M_\infty = 15, x = 27$				$M_\infty = 15, x = 7$				$M_\infty = 10, x = 150$	
0	0.875	1.33	0.0845	0.875	1.73	0.189	0.875	1.65	0.162
0.1	0.808	1.05	0.0844	0.872	1.57	0.189	0.830	0.675	0.161
0.2	0.747	0.770	0.0844	0.879	1.41	0.190	0.784	0.328	0.160
0.3	0.709	0.561	0.0844	0.900	1.23	0.192	0.737	0.297	0.158
0.4	0.678	0.378	0.0846	0.939	1.05	0.199	0.687	0.291	0.155
0.5	0.657	0.270	0.0857	0.989	0.865	0.208	0.638	0.310	0.151
0.6	0.652	0.223	0.0883	1.04	0.715	0.220	0.590	0.340	0.147
0.7	0.669	0.197	0.0949	1.11	0.601	0.238	0.539	0.342	0.141
0.8	0.706	0.185	0.105	1.20	0.577	0.269	0.482	0.330	0.133
0.9	0.759	0.185	0.120	1.37	0.501	0.336	0.402	0.302	0.121
1.0	0.830	0.186	0.141	1.62	0.498	0.449	0.277	0.279	0.104

Table 34 Concluded

$\theta_b = 5^\circ, \gamma = 1.4$									
$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$
$M_\infty = 6, x = 5$				$M_\infty = 6, x = 53$				$M_\infty = 4, x = 16$	
0	0.875	2.18	0.326	0.875	2.12	0.295	0.875	2.89	0.534
0.1	0.852	2.02	0.326	0.756	0.730	0.294	0.700	2.15	0.532
0.2	0.849	1.82	0.329	0.657	0.696	0.289	0.569	1.79	0.527
0.3	0.861	1.61	0.334	0.570	0.760	0.282	0.474	1.70	0.518
0.4	0.888	1.40	0.344	0.488	0.760	0.273	0.399	1.66	0.508
0.5	0.924	1.24	0.356	0.408	0.756	0.262	0.357	1.64	0.509
0.6	1.00	1.12	0.380	0.339	0.752	0.253	0.347	1.64	0.516
0.7	1.13	1.07	0.425	0.293	0.740	0.245	0.390	1.65	0.530
0.8	1.34	1.06	0.506	0.276	0.730	0.246	0.500	1.68	0.564
0.9	1.62	1.07	0.628	0.333	0.750	0.262	0.653	1.72	0.624
1.0	1.88	1.10	0.785	0.417	0.767	0.280	0.836	1.78	0.708
$M_\infty = 6, x = 7$				$M_\infty = 6, x = 150$				$M_\infty = 4, x = 27$	
0	0.875	2.11	0.291	0.875	2.13	0.302	0.875	2.92	0.553
0.1	0.819	1.88	0.291	0.788	1.67	0.300	0.707	1.84	0.550
0.2	0.786	1.65	0.293	0.708	1.30	0.298	0.570	1.65	0.543
0.3	0.766	1.40	0.297	0.623	1.03	0.295	0.468	1.65	0.533
0.4	0.770	1.22	0.307	0.555	0.94	0.289	0.391	1.64	0.520
0.5	0.799	1.08	0.321	0.495	0.88	0.283	0.320	1.64	0.509
0.6	0.843	0.994	0.341	0.433	0.83	0.275	0.267	1.62	0.500
0.7	0.899	0.950	0.364	0.380	0.80	0.266	0.273	1.62	0.504
0.8	1.07	0.949	0.433	0.321	0.76	0.257	0.346	1.64	0.526
0.9	1.30	0.975	0.527	0.263	0.74	0.247	0.450	1.67	0.563
1.0	1.54	1.01	0.634	0.206	0.72	0.236	0.576	1.71	0.616
$M_\infty = 6, x = 16$				$M_\infty = 4, x = 5$				$M_\infty = 4, x = 53$	
0	0.875	2.05	0.263	0.875	2.90	0.539	0.875	2.93	0.564
0.1	0.747	1.59	0.262	0.780	2.65	0.540	0.721	2.22	0.559
0.2	0.643	1.15	0.261	0.720	2.40	0.542	0.593	1.92	0.554
0.3	0.567	0.929	0.260	0.664	2.17	0.548	0.477	1.76	0.544
0.4	0.522	0.840	0.260	0.615	2.01	0.557	0.387	1.69	0.526
0.5	0.507	0.804	0.264	0.607	1.91	0.569	0.320	1.66	0.515
0.6	0.523	0.800	0.276	0.709	1.85	0.596	0.290	1.63	0.513
0.7	0.568	0.802	0.295	0.947	1.89	0.693	0.293	1.63	0.516
0.8	0.649	0.819	0.319	1.25	1.95	0.825	0.309	1.63	0.523
0.9	0.755	0.880	0.355	1.52	2.00	0.966	0.331	1.64	0.533
1.0	0.917	0.865	0.411	1.77	2.08	1.12	0.353	1.65	0.545
$M_\infty = 6, x = 27$				$M_\infty = 4, x = 7$					
0	0.875	2.08	0.275	0.875	2.87	0.522			
0.1	0.733	1.25	0.275	0.744	2.54	0.522			
0.2	0.626	0.860	0.270	0.654	2.22	0.523			
0.3	0.531	0.804	0.265	0.596	1.97	0.526			
0.4	0.458	0.776	0.258	0.569	1.85	0.532			
0.5	0.402	0.756	0.252	0.570	1.78	0.547			
0.6	0.383	0.753	0.255	0.584	1.75	0.569			
0.7	0.405	0.760	0.264	0.692	1.77	0.617			
0.8	0.456	0.771	0.277	0.970	1.83	0.719			
0.9	0.534	0.787	0.298	1.19	1.90	0.830			
1.0	0.643	0.809	0.334	1.44	1.97	0.962			

Table 35

 $\theta_b = 5^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$
$H = 60, V_\infty = 10\ 000, x = 2.45$						$H = 60, V_\infty = 10\ 000, x = .52$				
0	0.875	3.34	0.74	0.237	2.86	0.875	2.92	0.208	0.0569	3.57
0.1	0.960	3.20	0.77	0.236	3.04	0.831	2.22	0.270	0.0569	4.86
0.2	1.04	3.00	0.80	0.237	3.30	0.790	1.23	0.420	0.0568	6.56
0.3	1.13	2.76	0.85	0.238	3.65	0.751	0.408	0.695	0.0567	9.16
0.4	1.23	2.50	0.91	0.239	4.05	0.714	0.163	1.13	0.0564	13.3
0.5	1.35	2.20	1.00	0.242	4.50	0.684	0.100	1.78	0.0558	16.1
0.6	1.46	1.88	1.16	0.250	4.96	0.657	0.081	2.40	0.0553	18.0
0.7	1.70	1.52	1.44	0.279	5.52	0.635	0.069	2.77	0.0552	19.0
0.8	2.05	1.13	2.04	0.351	6.49	0.625	0.060	3.07	0.0560	19.7
0.9	2.37	0.755	4.05	0.482	7.91	0.622	0.060	3.36	0.0581	20.3
1.0	2.70	0.450	9.01	0.762	9.63	0.627	0.060	3.60	0.0615	20.5
$H = 60, V_\infty = 10\ 000, x = 5.8$						$H = 60, V_\infty = 7500, x = 2.45$				
0	0.875	3.16	0.437	0.130	3.17	0.875	3.35	0.689	0.266	2.63
0.1	0.923	2.95	0.455	0.131	3.44	0.996	3.12	0.720	0.266	2.90
0.2	0.974	2.69	0.480	0.132	3.82	1.11	2.84	0.755	0.266	3.19
0.3	1.02	2.39	0.524	0.134	4.28	1.23	2.56	0.800	0.268	3.50
0.4	1.08	2.06	0.600	0.136	4.79	1.34	2.27	0.855	0.270	3.82
0.5	1.14	1.66	0.703	0.140	5.41	1.46	1.98	0.910	0.276	4.17
0.6	1.19	1.17	0.907	0.148	6.40	1.57	1.67	1.08	0.286	4.60
0.7	1.24	0.735	1.37	0.159	8.03	1.75	1.37	1.44	0.314	5.27
0.8	1.32	0.454	2.14	0.179	9.79	2.04	1.06	2.33	0.404	6.27
0.9	1.45	0.290	3.30	0.222	10.8	2.40	0.730	3.93	0.562	7.16
1.0	1.65	0.211	6.09	0.327	11.8	2.73	0.514	6.87	0.830	7.68
$H = 60, V_\infty = 10\ 000, x = 6.4$						$H = 60, V_\infty = 7500, x = 5.5$				
0	0.875	3.14	0.412	0.122	3.20	0.875	3.14	0.424	0.155	2.83
0.1	0.909	2.91	0.434	0.122	3.48	0.890	2.83	0.440	0.155	3.21
0.2	0.948	2.66	0.460	0.123	3.92	0.920	2.50	0.480	0.155	3.58
0.3	0.990	2.36	0.500	0.125	4.37	0.962	2.14	0.515	0.157	3.93
0.4	1.03	2.00	0.560	0.128	4.79	1.02	1.77	0.580	0.161	4.52
0.5	1.08	1.52	0.680	0.132	5.38	1.10	1.39	0.777	0.166	5.34
0.6	1.14	1.06	0.925	0.139	6.52	1.18	1.01	1.02	0.176	6.52
0.7	1.20	0.684	1.42	0.149	8.31	1.28	0.660	1.42	0.189	7.50
0.8	1.27	0.413	2.14	0.169	10.1	1.38	0.439	1.99	0.213	8.35
0.9	1.38	0.260	3.26	0.204	11.3	1.52	0.320	3.13	0.256	9.23
1.0	1.56	0.194	5.93	0.296	12.2	1.73	0.258	5.38	0.371	10.2
$H = 60, V_\infty = 10\ 000, x = 24.8$						$H = 60, V_\infty = 7500, x = 6.4$				
0	0.875	2.95	0.22	0.0632	3.52	0.875	3.11	0.395	0.144	2.92
0.1	0.845	2.49	0.25	0.0632	3.98	0.832	2.81	0.420	0.144	3.33
0.2	0.821	1.98	0.28	0.0632	4.50	0.910	2.41	0.460	0.144	3.74
0.3	0.803	1.36	0.37	0.0632	6.14	0.936	2.06	0.495	0.144	4.16
0.4	0.788	0.720	0.60	0.0636	8.40	0.976	1.70	0.600	0.146	4.77
0.5	0.776	0.369	0.89	0.0642	10.8	1.03	1.26	0.770	0.150	5.73
0.6	0.768	0.209	1.30	0.0658	12.7	1.12	0.874	1.04	0.157	6.86
0.7	0.766	0.130	1.86	0.0685	14.5	1.21	0.577	1.40	0.171	7.83
0.8	0.763	0.092	2.54	0.0727	15.9	1.31	0.383	2.00	0.193	8.71
0.9	0.784	0.080	3.39	0.0811	17.1	1.42	0.290	3.12	0.229	9.72
1.0	0.837	0.081	4.31	0.0979	17.8	1.59	0.229	5.16	0.320	10.8

Table 35 Continued

 $\theta_b = 5^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 60, V_\infty = 7500, x = 24.8$						$H = 30, V_\infty = 7500, x = 6.4$					
0	0.875	2.86	0.206	0.0702	3.25	0.885	2.89	0.362	0.151	2.94	
0.1	0.841	2.27	0.217	0.0702	3.85	0.901	2.57	0.389	0.151	3.22	
0.2	0.812	1.61	0.310	0.0703	4.95	0.933	2.26	0.431	0.150	3.55	
0.3	0.790	1.05	0.441	0.0705	6.32	0.974	1.96	0.470	0.150	3.93	
0.4	0.773	0.550	0.650	0.0708	8.15	1.02	1.63	0.559	0.152	4.41	
0.5	0.758	0.271	0.940	0.0716	10.0	1.09	1.28	0.718	0.155	5.33	
0.6	0.751	0.184	1.38	0.0737	11.8	1.16	0.906	0.942	0.163	6.42	
0.7	0.756	0.150	1.84	0.0776	13.2	1.24	0.591	1.29	0.176	7.31	
0.8	0.772	0.124	2.37	0.0848	14.1	1.34	0.409	1.93	0.197	8.32	
0.9	0.795	0.114	2.97	0.0951	14.7	1.45	0.301	2.96	0.239	9.52	
1.0	0.836	0.108	3.57	0.109	15.2	1.63	0.232	5.32	0.333	10.7	
$H = 60, V_\infty = 7500, x = 28.5$						$H = 30, V_\infty = 7500, x = 24.8$					
0	0.875	2.84	0.197	0.0671	3.27	0.875	2.57	0.191	0.0698	3.34	
0.1	0.834	2.21	0.231	0.0670	3.98	0.847	2.10	0.219	0.0698	3.91	
0.2	0.800	1.50	0.315	0.0671	5.05	0.815	1.62	0.281	0.0698	4.64	
0.3	0.773	0.870	0.490	0.0672	6.49	0.795	1.07	0.373	0.0699	5.78	
0.4	0.752	0.390	0.766	0.0674	8.45	0.779	0.602	0.529	0.0702	7.40	
0.5	0.734	0.225	1.09	0.0684	10.8	0.764	0.305	0.830	0.0711	9.28	
0.6	0.721	0.161	1.48	0.0701	12.8	0.761	0.195	1.31	0.0730	11.3	
0.7	0.720	0.124	1.93	0.0736	14.1	0.767	0.142	1.87	0.0770	13.1	
0.8	0.731	0.121	2.44	0.0796	14.8	0.797	0.109	2.54	0.0849	14.5	
0.9	0.752	0.110	2.96	0.0884	15.4	0.818	0.101	3.11	0.0971	15.2	
1.0	0.786	0.102	3.43	0.100	15.6	0.863	0.100	3.75	0.113	15.4	
$H = 30, V_\infty = 7500, x = 2.45$						$H = 30, V_\infty = 7500, x = 52$					
0	0.875	3.12	0.659	0.282	2.63	0.875	2.54	0.171	0.0615	3.43	
0.1	1.01	2.93	0.671	0.280	2.81	0.826	1.73	0.239	0.0615	4.63	
0.2	1.14	2.70	0.702	0.281	3.06	0.777	0.838	0.388	0.0615	6.61	
0.3	1.26	2.45	0.751	0.284	3.33	0.735	0.289	0.799	0.0612	9.81	
0.4	1.37	2.18	0.821	0.286	3.63	0.692	0.150	1.40	0.0603	12.9	
0.5	1.49	1.90	0.922	0.293	3.96	0.666	0.109	1.85	0.0601	14.9	
0.6	1.64	1.61	1.13	0.303	4.46	0.663	0.091	2.23	0.0599	16.2	
0.7	1.83	1.32	1.55	0.351	5.17	0.661	0.086	2.52	0.0602	17.1	
0.8	2.16	1.01	2.43	0.455	6.01	0.660	0.081	2.78	0.0623	17.6	
0.9	2.51	0.736	4.05	0.629	6.81	0.661	0.080	2.99	0.0657	17.8	
1.0	2.77	0.485	6.72	0.855	7.53	0.664	0.079	3.05	0.0704	17.5	
$H = 30, V_\infty = 7500, x = 5.8$						$H = 30, V_\infty = 6000, x = 2.45$					
0	0.875	2.89	0.388	0.160	2.92	0.875	2.92	0.60	0.286	2.58	
0.1	0.905	2.63	0.411	0.160	3.19	0.937	2.74	0.63	0.287	2.76	
0.2	0.938	2.34	0.503	0.160	3.47	1.01	2.55	0.68	0.288	2.96	
0.3	0.980	2.02	0.580	0.160	3.85	1.11	2.32	0.77	0.294	3.23	
0.4	1.03	1.69	0.647	0.161	4.45	1.22	2.08	0.86	0.303	3.57	
0.5	1.09	1.35	0.779	0.166	5.31	1.34	1.83	0.98	0.314	3.98	
0.6	1.18	0.982	0.978	0.174	6.14	1.48	1.55	1.16	0.334	4.51	
0.7	1.29	0.673	1.33	0.189	7.08	1.77	1.27	1.52	0.384	4.98	
0.8	1.40	0.450	1.96	0.213	8.13	2.16	0.995	2.18	0.489	5.48	
0.9	1.53	0.320	3.05	0.261	9.30	2.51	0.760	3.46	0.644	6.03	
1.0	1.73	0.253	5.46	0.368	10.3	2.84	0.590	6.15	0.916	6.77	

Table 35 Continued

$\theta_b = 5^\circ$	$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$p$	$p \cdot 10$	$\beta$
$H = 30, V_\infty = 6000, x = 4.9$						$H = 30, V_\infty = 5000, x = 24.5$					
0	0.875	2.74	0.43	0.195	2.78	0.875	2.87	0.691	0.329	2.61	
0.1	0.915	2.51	0.47	0.195	2.99	0.943	2.68	0.720	0.329	2.84	
0.2	0.960	2.25	0.52	0.195	3.40	1.02	2.45	0.770	0.328	3.08	
0.3	1.02	1.97	0.59	0.195	3.88	1.11	2.22	0.810	0.329	3.36	
0.4	1.08	1.65	0.69	0.197	4.42	1.19	1.97	0.850	0.330	3.63	
0.5	1.16	1.25	0.81	0.201	5.04	1.30	1.72	0.940	0.334	3.96	
0.6	1.24	0.94	0.98	0.205	5.67	1.47	1.44	1.10	0.351	4.32	
0.7	1.34	0.71	1.28	0.221	6.35	1.84	1.20	1.48	0.421	4.62	
0.8	1.44	0.53	1.88	0.249	7.17	2.21	0.982	2.14	0.527	5.07	
0.9	1.57	0.40	2.89	0.317	8.02	2.55	0.795	3.38	0.685	5.66	
1.0	1.93	0.33	5.18	0.464	8.89	2.86	0.637	5.67	0.952	6.30	
$H = 30, V_\infty = 6000, x = 16$						$H = 30, V_\infty = 5000, x = 5.8$					
0	0.875	2.42	0.24	0.0921	3.16	0.875	2.62	0.428	0.187	2.94	
0.1	0.849	2.09	0.27	0.0920	3.62	0.938	2.36	0.450	0.188	3.24	
0.2	0.835	1.70	0.32	0.0922	4.25	1.00	2.07	0.488	0.188	3.58	
0.3	0.829	1.25	0.39	0.0925	5.09	1.07	1.77	0.537	0.190	3.93	
0.4	0.831	0.810	0.49	0.0934	6.03	1.14	1.43	0.609	0.193	4.36	
0.5	0.838	0.510	0.72	0.0953	7.23	1.20	1.07	0.764	0.198	4.91	
0.6	0.858	0.330	1.10	0.0996	8.77	1.26	0.806	1.01	0.207	5.57	
0.7	0.890	0.245	1.60	0.107	10.2	1.31	0.604	1.36	0.216	6.45	
0.8	0.933	0.195	2.15	0.116	11.3	1.38	0.451	1.87	0.236	7.36	
0.9	0.982	0.165	2.85	0.139	12.0	1.52	0.380	2.82	0.294	8.08	
1.0	1.04	0.160	3.71	0.167	12.5	1.77	0.331	4.51	0.418	8.66	
$H = 30, V_\infty = 6000, x = 24.8$						$H = 30, V_\infty = 5000, x = 6.4$					
0	0.875	2.35	0.21	0.0761	3.27	0.875	2.59	0.403	0.175	2.98	
0.1	0.835	1.90	0.23	0.0761	4.05	0.911	2.35	0.420	0.175	3.27	
0.2	0.803	1.38	0.29	0.0762	4.90	0.975	2.07	0.450	0.175	3.60	
0.3	0.777	0.855	0.40	0.0764	5.95	1.04	1.73	0.508	0.177	4.00	
0.4	0.757	0.485	0.60	0.0766	7.43	1.11	1.38	0.580	0.181	4.46	
0.5	0.742	0.295	0.96	0.0776	9.37	1.17	1.00	0.690	0.186	5.04	
0.6	0.737	0.195	1.38	0.0799	11.0	1.22	0.751	0.905	0.195	5.76	
0.7	0.745	0.160	1.85	0.0850	12.4	1.28	0.556	1.35	0.207	6.67	
0.8	0.771	0.150	2.36	0.0940	13.3	1.33	0.420	1.90	0.226	7.68	
0.9	0.816	0.135	2.84	0.107	13.6	1.45	0.346	2.76	0.270	8.35	
1.0	0.867	0.140	3.29	0.125	13.6	1.67	0.310	4.38	0.381	8.94	
$H = 30, V_\infty = 6000, x = 52$						$H = 30, V_\infty = 5000, x = 24.8$					
0	0.875	2.32	0.195	0.0695	3.30	0.875	2.29	0.214	0.0843	3.37	
0.1	0.816	1.42	0.260	0.0695	4.73	0.825	1.80	0.230	0.0844	3.98	
0.2	0.761	0.62	0.540	0.0694	6.95	0.788	1.23	0.300	0.0844	4.68	
0.3	0.711	0.25	1.07	0.0690	9.80	0.759	0.740	0.444	0.0844	5.84	
0.4	0.667	0.16	1.59	0.0681	12.3	0.734	0.437	0.710	0.0847	7.66	
0.5	0.632	0.13	1.84	0.0671	13.8	0.719	0.286	1.08	0.0862	9.32	
0.6	0.605	0.11	2.01	0.0666	14.6	0.717	0.220	1.44	0.0893	10.5	
0.7	0.537	0.10	2.14	0.0670	15.0	0.730	0.190	1.78	0.0954	11.4	
0.8	0.582	0.10	2.26	0.0690	15.2	0.759	0.174	2.20	0.106	12.1	
0.9	0.591	0.10	2.37	0.0731	15.2	0.812	0.168	2.59	0.121	12.2	
1.0	0.614	0.10	2.61	0.0793	15.2	0.872	0.169	2.91	0.141	12.0	

Table 35 Continued

 $\theta_b = 5^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$
$H = 30, V_\infty = 5000, x = 52$										
0	0.875	2.26	0.204	0.0799	3.40	0.875	2.15	0.203	0.0955	3.17
0.1	0.805	1.20	0.336	0.0798	4.98	0.806	1.62	0.218	0.0954	3.58
0.2	0.745	0.459	0.657	0.0796	7.38	0.758	1.10	0.330	0.0956	4.52
0.3	0.689	0.232	1.22	0.0786	10.4	0.720	0.660	0.519	0.0958	6.09
0.4	0.641	0.170	1.57	0.0772	11.9	0.696	0.423	0.832	0.0971	7.44
0.5	0.601	0.150	1.73	0.0758	12.7	0.686	0.309	1.16	0.0999	8.55
0.6	0.572	0.137	1.87	0.0751	13.1	0.685	0.251	1.45	0.104	9.63
0.7	0.556	0.130	1.99	0.0757	13.3	0.693	0.233	1.69	0.111	10.1
0.8	0.556	0.140	2.09	0.0779	13.5	0.730	0.229	1.90	0.121	10.1
0.9	0.571	0.140	2.18	0.0830	13.6	0.789	0.230	2.15	0.142	10.1
1.0	0.601	0.138	2.26	0.0907	13.3	0.867	0.231	2.50	0.165	10.2
$H = 30, V_\infty = 4000, x = 24.8$										
0	0.875	2.85	0.674	0.376	2.47	0.875	2.16	0.209	0.0989	3.15
0.1	0.994	2.69	0.700	0.375	2.61	0.784	0.910	0.512	0.0990	5.12
0.2	1.12	2.48	0.725	0.375	2.80	0.714	0.402	0.872	0.0978	7.99
0.3	1.24	2.23	0.770	0.376	3.03	0.651	0.252	1.35	0.0957	10.0
0.4	1.34	1.94	0.837	0.378	3.30	0.592	0.212	1.50	0.0927	10.6
0.5	1.45	1.66	0.967	0.381	3.60	0.539	0.197	1.56	0.0896	11.0
0.6	1.62	1.42	1.12	0.397	3.93	0.508	0.190	1.60	0.0879	11.2
0.7	1.90	1.23	1.45	0.470	4.25	0.502	0.187	1.65	0.0897	11.3
0.8	2.27	1.05	2.07	0.587	4.63	0.519	0.187	1.71	0.0940	11.3
0.9	2.65	0.870	3.21	0.789	5.13	0.546	0.189	1.79	0.0996	11.2
1.0	2.94	0.738	5.17	1.03	5.67	0.583	0.196	1.96	0.110	11.1
$H = 30, V_\infty = 4000, x = 2.45$										
0	0.875	2.52	0.395	0.204	2.79	0.875	2.51	0.61	0.380	2.42
0.1	0.922	2.30	0.413	0.203	2.97	0.963	2.35	0.64	0.380	2.58
0.2	0.975	2.03	0.445	0.204	3.26	1.06	2.16	0.69	0.380	2.76
0.3	1.03	1.66	0.507	0.208	3.64	1.15	1.97	0.74	0.384	2.97
0.4	1.11	1.31	0.614	0.214	4.12	1.25	1.78	0.81	0.389	3.18
0.5	1.19	1.06	0.780	0.222	4.67	1.36	1.61	0.92	0.396	3.41
0.6	1.26	0.858	1.02	0.233	5.29	1.57	1.44	1.12	0.433	3.71
0.7	1.34	0.660	1.38	0.250	5.99	1.93	1.28	1.50	0.523	4.01
0.8	1.45	0.506	1.88	0.278	6.69	2.28	1.13	2.09	0.653	4.34
0.9	1.62	0.440	2.71	0.340	7.31	2.63	0.997	3.07	0.842	4.67
1.0	1.82	0.411	4.03	0.469	7.64	2.95	0.890	4.46	1.11	4.98
$H = 30, V_\infty = 4000, x = 5.8$										
0	0.875	2.49	0.372	0.191	2.83	0.875	2.19	0.40	0.223	2.73
0.1	0.921	2.23	0.380	0.190	3.00	0.902	1.96	0.44	0.223	2.99
0.2	0.970	1.95	0.415	0.191	3.28	0.936	1.74	0.48	0.225	3.28
0.3	1.02	1.62	0.480	0.194	3.68	0.981	1.50	0.56	0.227	3.63
0.4	1.08	1.30	0.580	0.199	4.20	1.03	1.25	0.67	0.232	4.07
0.5	1.15	1.01	0.767	0.207	4.74	1.10	1.03	0.83	0.240	4.55
0.6	1.22	0.799	1.00	0.219	5.42	1.18	0.860	1.08	0.253	5.09
0.7	1.29	0.626	1.36	0.236	6.18	1.29	0.700	1.45	0.275	5.67
0.8	1.38	0.500	1.89	0.264	6.96	1.42	0.607	1.88	0.311	6.21
0.9	1.51	0.419	2.71	0.321	7.58	1.54	0.567	2.53	0.392	6.42
1.0	1.72	0.388	3.90	0.430	7.86	1.82	0.550	3.38	0.531	6.49
$H = 30, V_\infty = 3000, x = 2.45$										
0	0.875	2.52	0.395	0.204	2.79	0.875	2.51	0.61	0.380	2.42
0.1	0.922	2.30	0.413	0.203	2.97	0.963	2.35	0.64	0.380	2.58
0.2	0.975	2.03	0.445	0.204	3.26	1.06	2.16	0.69	0.380	2.76
0.3	1.03	1.66	0.507	0.208	3.64	1.15	1.97	0.74	0.384	2.97
0.4	1.11	1.31	0.614	0.214	4.12	1.25	1.78	0.81	0.389	3.18
0.5	1.19	1.06	0.780	0.222	4.67	1.36	1.61	0.92	0.396	3.41
0.6	1.26	0.858	1.02	0.233	5.29	1.57	1.44	1.12	0.433	3.71
0.7	1.34	0.660	1.38	0.250	5.99	1.93	1.28	1.50	0.523	4.01
0.8	1.45	0.506	1.88	0.278	6.69	2.28	1.13	2.09	0.653	4.34
0.9	1.62	0.440	2.71	0.340	7.31	2.63	0.997	3.07	0.842	4.67
1.0	1.82	0.411	4.03	0.469	7.64	2.95	0.890	4.46	1.11	4.98
$H = 30, V_\infty = 3000, x = 5.8$										
0	0.875	2.49	0.372	0.191	2.83	0.875	2.19	0.40	0.223	2.73
0.1	0.921	2.23	0.380	0.190	3.00	0.902	1.96	0.44	0.223	2.99
0.2	0.970	1.95	0.415	0.191	3.28	0.936	1.74	0.48	0.225	3.28
0.3	1.02	1.62	0.480	0.194	3.68	0.981	1.50	0.56	0.227	3.63
0.4	1.08	1.30	0.580	0.199	4.20	1.03	1.25	0.67	0.232	4.07
0.5	1.15	1.01	0.767	0.207	4.74	1.10	1.03	0.83	0.240	4.55
0.6	1.22	0.799	1.00	0.219	5.42	1.18	0.860	1.08	0.253	5.09
0.7	1.29	0.626	1.36	0.236	6.18	1.29	0.700	1.45	0.275	5.67
0.8	1.38	0.500	1.89	0.264	6.96	1.42	0.607	1.88	0.311	6.21
0.9	1.51	0.419	2.71	0.321	7.58	1.54	0.567	2.53	0.392	6.42
1.0	1.72	0.388	3.90	0.430	7.86	1.82	0.550	3.38	0.531	6.49

Table 35 Continued

 $\theta_b = 5^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 30, V_\infty = 3000, x = 6.4$						$H = 10, V_\infty = 5000, x = 16$					
0	0.875	2.16	0.38	0.210	2.77	0.875	2.20	0.237	0.0999	3.28	
0.1	0.892	1.92	0.42	0.210	3.04	0.849	1.85	0.254	0.0999	3.66	
0.2	0.917	1.69	0.48	0.211	3.35	0.831	1.48	0.299	0.0999	4.18	
0.3	0.956	1.46	0.55	0.214	3.72	0.823	1.08	0.375	0.100	4.80	
0.4	1.00	1.20	0.67	0.218	4.21	0.820	0.735	0.525	0.101	5.82	
0.5	1.07	0.967	0.84	0.225	4.76	0.826	0.505	0.755	0.103	7.06	
0.6	1.14	0.800	1.09	0.238	5.30	0.845	0.352	1.11	0.108	8.47	
0.7	1.21	0.663	1.46	0.259	5.87	0.878	0.265	1.57	0.117	9.80	
0.8	1.30	0.575	1.90	0.295	6.33	0.932	0.220	2.13	0.133	10.6	
0.9	1.47	0.540	2.44	0.364	6.60	1.00	0.200	2.74	0.156	11.0	
1.0	1.71	0.530	3.27	0.490	6.65	1.07	0.195	3.39	0.188	11.2	
$H = 30, V_\infty = 3000, x = 24.8$						$H = 10, V_\infty = 5000, x = 24.8$					
0	0.875	1.90	0.260	0.129	3.06	0.875	2.12	0.203	0.0834	3.37	
0.1	0.770	1.28	0.350	0.129	3.89	0.825	1.66	0.234	0.0833	3.87	
0.2	0.703	0.835	0.575	0.128	5.10	0.788	1.20	0.306	0.0834	4.65	
0.3	0.639	0.557	0.805	0.128	6.40	0.759	0.762	0.432	0.0835	5.86	
0.4	0.589	0.455	1.04	0.127	7.46	0.737	0.473	0.661	0.0833	7.45	
0.5	0.564	0.385	1.22	0.128	8.09	0.723	0.290	1.00	0.0854	9.11	
0.6	0.574	0.345	1.34	0.134	8.37	0.720	0.218	1.42	0.0882	10.5	
0.7	0.610	0.340	1.49	0.145	8.52	0.733	0.180	1.83	0.0948	11.6	
0.8	0.664	0.340	1.68	0.160	8.56	0.767	0.166	2.14	0.105	12.0	
0.9	0.733	0.345	1.85	0.180	8.45	0.820	0.166	2.52	0.121	12.1	
1.0	0.811	0.355	2.01	0.204	8.26	0.880	0.167	2.96	0.141	12.1	
$H = 10, V_\infty = 5000, x = 2.45$						$H = 10, V_\infty = 5000, x = 52$					
0	0.875	2.76	0.667	0.337	2.65	0.875	2.09	0.192	0.0781	3.41	
0.1	0.960	2.54	0.670	0.336	2.81	0.805	1.19	0.280	0.0780	4.69	
0.2	1.06	2.36	0.700	0.336	3.01	0.741	0.480	0.629	0.0778	7.22	
0.3	1.16	2.13	0.760	0.338	3.23	0.687	0.222	1.15	0.0769	10.3	
0.4	1.26	1.91	0.828	0.339	3.49	0.639	0.171	1.57	0.0755	12.1	
0.5	1.35	1.69	0.930	0.340	3.79	0.601	0.149	1.77	0.0743	12.9	
0.6	1.51	1.46	1.10	0.360	4.13	0.573	0.140	1.87	0.0738	13.5	
0.7	1.86	1.22	1.44	0.428	4.52	0.559	0.135	1.92	0.0748	13.8	
0.8	2.22	1.00	2.15	0.530	4.97	0.561	0.137	1.97	0.0779	13.8	
0.9	2.56	0.809	3.18	0.688	5.55	0.581	0.140	2.11	0.0834	13.8	
1.0	2.89	0.643	5.72	0.968	6.26	0.605	0.135	2.31	0.0941	13.4	
$H = 10, V_\infty = 5000, x = 4.9$						$H = 10, V_\infty = 3000, x = 2.45$					
0	0.875	2.53	0.451	0.212	2.87	0.875	2.44	0.60	0.376	2.46	
0.1	0.942	2.30	0.468	0.212	3.12	0.955	2.29	0.65	0.375	2.62	
0.2	1.01	2.06	0.500	0.213	3.37	1.06	2.11	0.69	0.376	2.80	
0.3	1.10	1.80	0.560	0.215	3.66	1.15	1.97	0.74	0.375	2.99	
0.4	1.18	1.50	0.627	0.218	4.06	1.23	1.79	0.80	0.385	3.20	
0.5	1.25	1.19	0.760	0.223	4.57	1.33	1.61	0.91	0.388	3.43	
0.6	1.33	0.933	0.985	0.230	5.18	1.54	1.43	1.12	0.425	3.71	
0.7	1.39	0.711	1.28	0.243	5.93	1.92	1.27	1.48	0.517	4.01	
0.8	1.47	0.542	1.80	0.267	6.77	2.27	1.12	2.09	0.645	4.34	
0.9	1.71	0.445	2.86	0.352	7.52	2.61	0.990	3.05	0.830	4.68	
1.0	1.97	0.375	4.80	0.498	8.16	2.94	0.879	4.48	1.10	5.01	

Table 35 Concluded

$\theta_b = 5^\circ$

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$						
$H = 10, V_\infty = 3000, x = 5.8$																	
0	0.875	2.13	0.401	0.220	2.78	0.6	1.40	2.00	1.04	0.415	3.58						
0.1	0.906	1.93	0.438	0.220	3.03	0.7	1.73	1.73	1.22	0.449	3.91						
0.2	0.940	1.71	0.489	0.222	3.30	0.8	2.18	1.29	1.80	0.540	4.46						
0.3	0.982	1.48	0.563	0.224	3.63	0.9	2.61	0.921	3.03	0.717	5.27						
0.4	1.03	1.23	0.677	0.230	4.05	1.0	3.02	0.688	5.80	1.04	6.06						
0.5	1.09	1.04	0.840	0.238	4.56												
0.6	1.17	0.840	1.07	0.252	5.14	$H = 30, V_\infty = 5000, \bar{R} = 0, x = 1.47$											
0.7	1.24	0.690	1.39	0.273	5.72	0	0.875	2.65	0.459	0.204	2.89						
0.8	1.34	0.595	1.81	0.310	6.19	0.1	0.966	2.48	0.465	0.203	3.08						
0.9	1.54	0.554	2.47	0.384	6.50	0.2	1.05	2.31	0.500	0.204	3.30						
1.0	1.81	0.542	3.40	0.525	6.55	0.3	1.14	2.10	0.527	0.207	3.54						
$H = 10, V_\infty = 3000, x = 6.4$																	
0	0.875	2.10	0.383	0.207	2.82	0.6	1.34	1.14	0.830	0.220	4.76						
0.1	0.892	1.89	0.425	0.208	3.06	0.7	1.37	0.700	1.22	0.228	5.96						
0.2	0.918	1.66	0.475	0.209	3.38	0.8	1.41	0.500	1.80	0.246	7.05						
0.3	0.954	1.43	0.550	0.212	3.76	0.9	1.54	0.390	2.80	0.292	8.05						
0.4	1.00	1.18	0.672	0.217	4.24	1.0	1.75	0.327	4.49	0.410	8.72						
0.5	1.06	0.975	0.826	0.225	4.74												
0.6	1.12	0.792	1.08	0.238	5.30	$H = 30, V_\infty = 5000, \bar{R} = 0, x = 4.66$											
0.7	1.20	0.649	1.43	0.261	5.92	0	0.875	2.61	0.42	0.186	2.94						
0.8	1.29	0.560	1.88	0.296	6.40	0.1	0.946	2.45	0.44	0.186	3.14						
0.9	1.47	0.525	2.49	0.365	6.70	0.2	1.02	2.27	0.46	0.187	3.34						
1.0	1.71	0.518	3.28	0.485	6.71	0.3	1.09	2.08	0.50	0.190	3.57						
0.4	1.17	1.08	0.672	0.217	4.24	1.0	1.75	0.327	4.49	0.410	8.72						
$H = 10, V_\infty = 3000, x = 24.8$																	
0	0.875	1.84	0.262	0.127	3.12	0.6	1.30	1.12	0.86	0.209	4.92						
0.1	0.781	1.32	0.351	0.127	3.90	0.7	1.33	0.682	1.28	0.218	6.21						
0.2	0.705	0.880	0.522	0.126	5.04	0.8	1.37	0.455	1.85	0.233	7.38						
0.3	0.649	0.566	0.787	0.126	6.46	0.9	1.47	0.350	2.69	0.273	8.38						
0.4	0.611	0.415	1.06	0.126	7.57	1.0	1.65	0.305	4.35	0.372	9.01						
0.5	0.587	0.361	1.24	0.128	8.18												
0.6	0.587	0.335	1.40	0.133	8.47	$H = 30, V_\infty = 5000, \bar{R} = 0, x = 19.5$											
0.7	0.618	0.326	1.54	0.143	8.62	0	0.875	2.28	0.213	0.0837	3.38						
0.8	0.668	0.330	1.67	0.158	8.64	0.1	0.827	1.99	0.230	0.0837	3.72						
0.9	0.732	0.335	1.84	0.177	8.54	0.2	0.790	1.60	0.257	0.0837	4.16						
1.0	0.815	0.345	2.03	0.201	8.35	0.3	0.762	1.13	0.330	0.0838	4.94						
$H = 10, V_\infty = 3000, x = 52$																	
0	0.875	1.89	0.282	0.139	3.06	0.6	0.722	0.212	1.46	0.0890	10.7						
0.1	0.784	0.640	0.760	0.139	5.88	0.7	0.731	0.180	1.00	0.0949	11.6						
0.2	0.699	0.403	1.20	0.137	7.78	0.8	0.758	0.167	2.16	0.105	11.9						
0.3	0.621	0.325	1.42	0.133	8.62	0.9	0.808	0.170	2.48	0.119	12.0						
0.4	0.550	0.314	1.44	0.127	8.90	1.0	0.881	0.170	2.93	0.143	11.9						
0.5	0.488	0.305	1.40	0.122	9.03												
0.6	0.444	0.293	1.39	0.118	9.09	$H = 30, V_\infty = 5000, \bar{R} = 0, x = 41.5$											
0.7	0.426	0.292	1.41	0.118	9.08	0	0.875	2.25	0.200	0.0780	3.41						
0.8	0.443	0.295	1.47	0.124	9.03	0.1	0.802	1.55	0.235	0.0780	4.30						
0.9	0.482	0.305	1.55	0.132	8.96	0.2	0.737	0.730	0.440	0.0779	6.16						
1.0	0.535	0.307	1.64	0.144	8.89	0.3	0.680	0.201	1.24	0.0767	11.2						
$H = 30, V_\infty = 5000, \bar{R} = 0, x = 1.47$																	
0	0.875	2.95	0.793	0.388	2.50	0.5	0.592	0.160	1.55	0.0741	12.6						
0.1	0.895	2.85	0.820	0.388	2.65	0.6	0.565	0.147	1.75	0.0737	13.0						
0.2	0.930	2.71	0.855	0.386	2.81	0.7	0.551	0.137	1.90	0.0749	13.2						
0.3	1.00	2.55	0.895	0.384	2.98	0.8	0.553	0.137	1.98	0.0777	13.4						
0.4	1.12	2.39	0.935	0.389	3.17	0.9	0.571	0.137	2.11	0.0829	13.4						
0.5	1.27	2.21	0.980	0.399	3.37	1.0	0.598	0.138	2.27	0.0901	13.3						

Table 36

 $\theta_b = 10^\circ, \gamma = 1.4$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$
$M_\infty = \infty, x = 4$				$M_\infty = \infty, x = 18.3$				$M_\infty = 23, x = 9$	
0	1.76	1.88	0.305	1.76	1.65	0.193	1.76	1.73	0.213
0.1	1.75	1.73	0.304	1.69	1.41	0.193	1.69	1.54	0.215
0.2	1.75	1.60	0.304	1.63	1.13	0.193	1.63	1.34	0.215
0.3	1.75	1.46	0.304	1.57	0.870	0.193	1.57	1.13	0.216
0.4	1.76	1.31	0.306	1.51	0.624	0.193	1.52	0.911	0.218
0.5	1.78	1.13	0.311	1.45	0.405	0.192	1.49	0.705	0.219
0.6	1.81	0.955	0.321	1.40	0.275	0.191	1.47	0.537	0.222
0.7	1.85	0.735	0.333	1.34	0.180	0.188	1.46	0.410	0.230
0.8	1.90	0.575	0.357	1.29	0.130	0.182	1.47	0.317	0.245
0.9	1.97	0.450	0.426	1.27	0.118	0.173	1.50	0.257	0.270
1.0	2.26	0.342	0.586	1.26	0.110	0.189	1.54	0.226	0.310
$M_\infty = \infty, x = 7.27$				$M_\infty = \infty, x = 40$				$M_\infty = 23, x = 14.8$	
0	1.76	1.71	0.218	1.76	1.94	0.340	1.76	1.71	0.208
0.1	1.71	1.55	0.218	1.73	1.22	0.340	1.68	1.41	0.208
0.2	1.66	1.37	0.219	1.71	0.745	0.340	1.61	1.14	0.208
0.3	1.63	1.19	0.219	1.69	0.388	0.339	1.55	0.890	0.207
0.4	1.60	1.01	0.220	1.67	0.196	0.335	1.48	0.665	0.206
0.5	1.58	0.820	0.223	1.64	0.140	0.328	1.43	0.475	0.203
0.6	1.58	0.645	0.227	1.62	0.125	0.317	1.37	0.334	0.202
0.7	1.58	0.490	0.235	1.59	0.135	0.305	1.32	0.250	0.201
0.8	1.60	0.360	0.253	1.56	0.138	0.291	1.29	0.204	0.203
0.9	1.63	0.245	0.283	1.52	0.145	0.276	1.28	0.186	0.212
1.0	1.68	0.193	0.331	1.48	0.151	0.260	1.30	0.179	0.229
$M_\infty = \infty, x = 9$				$M_\infty = 23, x = 4$				$M_\infty = 23, x = 18.3$	
0	1.76	1.67	0.201	1.76	1.92	0.318	1.76	1.73	0.217
0.1	1.71	1.54	0.200	1.75	1.78	0.316	1.68	1.42	0.217
0.2	1.65	1.32	0.200	1.74	1.62	0.317	1.62	1.10	0.216
0.3	1.61	1.12	0.200	1.74	1.47	0.318	1.55	0.800	0.216
0.4	1.56	0.931	0.201	1.75	1.30	0.322	1.48	0.537	0.215
0.5	1.52	0.731	0.203	1.77	1.12	0.328	1.42	0.358	0.213
0.6	1.50	0.564	0.206	1.79	0.940	0.335	1.36	0.253	0.209
0.7	1.50	0.408	0.213	1.82	0.750	0.349	1.30	0.209	0.203
0.8	1.50	0.291	0.226	1.87	0.580	0.371	1.26	0.186	0.198
0.9	1.52	0.210	0.249	2.00	0.475	0.454	1.22	0.171	0.199
1.0	1.57	0.169	0.290	2.26	0.405	0.616	1.22	0.165	0.206
$M_\infty = \infty, x = 14.8$				$M_\infty = 23, x = 7.27$				$M_\infty = 23, x = 40$	
0	1.76	1.64	0.188	1.76	1.76	0.233	1.76	1.97	0.346
0.1	1.70	1.42	0.188	1.70	1.59	0.233	1.71	0.970	0.347
0.2	1.64	1.18	0.187	1.65	1.41	0.233	1.70	0.502	0.346
0.3	1.57	0.954	0.187	1.61	1.22	0.233	1.67	0.262	0.344
0.4	1.52	0.700	0.186	1.58	1.01	0.235	1.64	0.217	0.339
0.5	1.46	0.490	0.185	1.55	0.825	0.238	1.61	0.187	0.332
0.6	1.41	0.340	0.183	1.54	0.647	0.244	1.58	0.170	0.322
0.7	1.37	0.241	0.183	1.55	0.500	0.256	1.55	0.179	0.311
0.8	1.34	0.175	0.185	1.57	0.370	0.273	1.51	0.180	0.297
0.9	1.33	0.136	0.192	1.61	0.304	0.303	1.46	0.191	0.282
1.0	1.33	0.123	0.211	1.66	0.251	0.352	1.41	0.200	0.264

Table 36 Continued

 $\theta_b = 10^\circ, \gamma = 1.4$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$
$M_\infty = 15, x = 4$				$M_\infty = 15, x = 18$				$M_\infty = 10, x = 9$	
0	1.76	1.98	0.334	1.76	1.81	0.247	1.76	1.95	0.288
0.1	1.73	1.73	0.334	1.68	1.42	0.247	1.66	1.68	0.287
0.2	1.72	1.67	0.334	1.59	1.06	0.247	1.57	1.41	0.287
0.3	1.71	1.50	0.336	1.52	0.748	0.245	1.49	1.13	0.287
0.4	1.72	1.32	0.340	1.45	0.497	0.243	1.43	0.887	0.287
0.5	1.74	1.14	0.346	1.38	0.366	0.238	1.38	0.695	0.288
0.6	1.76	0.958	0.356	1.31	0.305	0.231	1.34	0.575	0.293
0.7	1.78	0.780	0.366	1.25	0.267	0.224	1.34	0.520	0.305
0.8	1.82	0.652	0.390	1.20	0.249	0.220	1.35	0.492	0.323
0.9	2.00	0.550	0.477	1.18	0.239	0.221	1.39	0.460	0.350
1.0	2.25	0.487	0.651	1.18	0.239	0.229	1.44	0.458	0.382
$M_\infty = 15, x = 7.3$				$M_\infty = 15, x = 40$				$M_\infty = 10, x = 15$	
0	1.76	1.83	0.254	1.76	2.02	0.361	1.76	1.97	0.298
0.1	1.69	1.64	0.253	1.72	1.49	0.361	1.65	1.54	0.298
0.2	1.63	1.43	0.253	1.69	1.00	0.360	1.55	1.16	0.296
0.3	1.58	1.22	0.253	1.65	0.557	0.357	1.45	0.79	0.293
0.4	1.54	1.01	0.255	1.62	0.260	0.353	1.37	0.59	0.290
0.5	1.52	0.806	0.259	1.58	0.251	0.344	1.30	0.49	0.282
0.6	1.50	0.632	0.266	1.54	0.264	0.335	1.24	0.44	0.274
0.7	1.51	0.502	0.279	1.50	0.264	0.324	1.19	0.42	0.271
0.8	1.53	0.421	0.298	1.45	0.265	0.311	1.16	0.41	0.273
0.9	1.57	0.359	0.330	1.38	0.265	0.290	1.15	0.41	0.280
1.0	1.63	0.327	0.378	1.34	0.268	0.277	1.18	0.40	0.300
$M_\infty = 15, x = 9$				$M_\infty = 10, x = 4$				$M_\infty = 10, x = 18$	
0	1.76	1.80	0.239	1.76	2.09	0.372	1.76	1.99	0.313
0.1	1.68	1.59	0.238	1.72	1.92	0.371	1.66	1.47	0.313
0.2	1.61	1.36	0.238	1.69	1.74	0.371	1.56	1.03	0.312
0.3	1.54	1.13	0.238	1.67	1.58	0.373	1.47	0.692	0.308
0.4	1.49	0.891	0.239	1.67	1.38	0.378	1.39	0.495	0.301
0.5	1.45	0.694	0.241	1.67	1.18	0.387	1.31	0.445	0.291
0.6	1.43	0.546	0.244	1.68	1.01	0.397	1.23	0.425	0.279
0.7	1.42	0.434	0.255	1.70	0.856	0.416	1.16	0.405	0.269
0.8	1.43	0.362	0.272	1.81	0.755	0.459	1.11	0.396	0.265
0.9	1.46	0.316	0.298	1.98	0.691	0.554	1.09	0.395	0.266
1.0	1.51	0.301	0.333	2.23	0.659	0.721	1.10	0.394	0.277
$M_\infty = 15, x = 15$				$M_\infty = 10, x = 7.3$				$M_\infty = 6, x = 4$	
0	1.76	1.79	0.237	1.76	1.96	0.297	1.76	2.47	0.497
0.1	1.70	1.48	0.237	1.67	1.73	0.297	1.67	2.24	0.498
0.2	1.60	1.17	0.236	1.59	1.49	0.297	1.60	2.02	0.498
0.3	1.51	0.850	0.235	1.53	1.27	0.298	1.55	1.81	0.500
0.4	1.43	0.592	0.232	1.48	1.02	0.300	1.52	1.61	0.504
0.5	1.37	0.427	0.230	1.44	0.807	0.304	1.50	1.42	0.514
0.6	1.31	0.340	0.226	1.43	0.670	0.313	1.49	1.28	0.527
0.7	1.27	0.296	0.224	1.42	0.590	0.327	1.49	1.20	0.550
0.8	1.24	0.271	0.224	1.44	0.535	0.348	1.63	1.15	0.621
0.9	1.24	0.259	0.229	1.50	0.502	0.382	1.88	1.16	0.753
1.0	1.26	0.252	0.251	1.59	0.492	0.438	2.15	1.18	0.917

Table 36 Concluded

$\theta_b = 10^\circ, \gamma = 1.4$

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$
$M_\infty = 6, x = 7.3$				$M_\infty = 6, x = 40$				$M_\infty = 4, x = 15$	
0	1.76	2.39	0.448	1.76	2.53	0.547	1.76	3.23	0.794
0.1	1.63	2.07	0.448	1.67	1.85	0.544	1.56	3.22	0.788
0.2	1.52	1.78	0.447	1.59	1.34	0.541	1.40	3.15	0.773
0.3	1.41	1.42	0.445	1.52	1.05	0.536	1.26	3.04	0.756
0.4	1.32	1.20	0.444	1.44	0.945	0.529	1.14	2.91	0.741
0.5	1.27	1.08	0.445	1.37	0.900	0.519	1.05	2.76	0.729
0.6	1.26	1.02	0.451	1.30	0.887	0.506	0.975	2.58	0.720
0.7	1.26	0.992	0.465	1.22	0.888	0.490	0.911	2.40	0.712
0.8	1.27	0.972	0.494	1.14	0.884	0.472	0.863	2.22	0.707
0.9	1.40	0.973	0.558	1.04	0.873	0.446	0.833	2.03	0.704
1.0	1.51	1.00	0.624	0.890	0.860	0.403	0.884	1.80	0.726
$M_\infty = 6, x = 9$				$M_\infty = 4, x = 4$				$M_\infty = 4, x = 18$	
0	1.76	2.40	0.449	1.76	3.19	0.759	1.76	3.25	0.805
0.1	1.62	1.98	0.448	1.60	2.92	0.758	1.58	2.36	0.802
0.2	1.48	1.60	0.446	1.48	2.66	0.758	1.41	2.03	0.793
0.3	1.37	1.30	0.442	1.38	2.41	0.756	1.25	1.92	0.779
0.4	1.28	1.12	0.436	1.30	2.22	0.752	1.11	1.86	0.760
0.5	1.21	1.00	0.435	1.25	2.10	0.757	1.00	1.81	0.735
0.6	1.18	0.951	0.440	1.24	2.04	0.792	0.919	1.78	0.702
0.7	1.16	0.932	0.449	1.38	2.07	0.864	0.865	1.76	0.687
0.8	1.17	0.929	0.469	1.57	2.06	0.966	0.832	1.75	0.685
0.9	1.23	0.940	0.507	1.80	2.11	1.09	0.816	1.76	0.690
1.0	1.33	0.960	0.554	2.05	2.18	1.27	0.804	1.77	0.697
$M_\infty = 6, x = 15$				$M_\infty = 4, x = 7.3$				$M_\infty = 4, x = 40$	
0	1.76	2.44	0.481	1.76	3.18	0.748	1.76	3.27	0.824
0.1	1.63	1.70	0.476	1.56	2.71	0.747	1.61	2.70	0.817
0.2	1.42	1.21	0.473	1.40	2.38	0.741	1.48	2.25	0.809
0.3	1.38	0.973	0.464	1.27	2.13	0.732	1.36	1.99	0.800
0.4	1.26	0.920	0.456	1.14	1.93	0.720	1.25	1.85	0.783
0.5	1.15	0.900	0.440	1.05	1.84	0.711	1.16	1.80	0.777
0.6	1.06	0.889	0.419	0.981	1.82	0.705	1.08	1.78	0.761
0.7	1.01	0.880	0.414	0.936	1.82	0.704	0.982	1.79	0.740
0.8	1.00	0.880	0.419	0.972	1.84	0.738	0.865	1.78	0.703
0.9	1.00	0.880	0.428	1.13	1.90	0.824	0.722	1.76	0.655
1.0	1.02	0.888	0.444	1.42	1.96	0.954	0.516	1.69	0.597
$M_\infty = 6, x = 18$				$M_\infty = 4, x = 9$					
0	1.76	2.48	0.498	1.76	3.19	0.758			
0.1	1.64	1.58	0.493	1.56	2.59	0.756			
0.2	1.52	1.10	0.487	1.39	2.26	0.743			
0.3	1.40	0.900	0.480	1.25	2.05	0.736			
0.4	1.28	0.892	0.468	1.13	1.91	0.721			
0.5	1.18	0.884	0.450	1.02	1.83	0.705			
0.6	1.08	0.880	0.428	0.944	1.79	0.693			
0.7	1.01	0.868	0.416	0.888	1.78	0.686			
0.8	0.969	0.864	0.408	0.856	1.79	0.688			
0.9	0.928	0.860	0.405	0.963	1.82	0.747			
1.0	0.942	0.868	0.419	1.24	1.91	0.875			

Table 37

 $\theta_b = 10^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 60, V_\infty = 10\ 000, x = 4$						$H = 60, V_\infty = 10\ 000, x = 14.7$					
0	1.76	3.55	0.765	0.246	2.84	1.76	3.33	0.712	0.226	2.88	
0.1	1.76	3.24	0.800	0.245	3.20	1.70	2.78	0.825	0.226	3.68	
0.2	1.76	2.90	0.860	0.246	3.56	1.64	2.13	1.02	0.226	4.69	
0.3	1.76	2.52	0.945	0.248	4.00	1.59	1.43	1.24	0.226	5.84	
0.4	1.77	2.12	1.05	0.251	4.48	1.53	0.735	2.00	0.225	7.73	
0.5	1.77	1.71	1.21	0.256	5.04	1.47	0.360	3.01	0.223	9.44	
0.6	1.78	1.29	1.48	0.263	5.88	1.42	0.240	3.75	0.221	10.9	
0.7	1.79	0.912	2.01	0.278	7.08	1.37	0.195	4.55	0.216	12.4	
0.8	1.81	0.600	2.97	0.301	8.52	1.32	0.154	5.14	0.209	13.4	
0.9	1.87	0.388	4.44	0.350	10.0	1.28	0.140	5.33	0.202	13.9	
1.0	2.03	0.292	7.00	0.474	10.8	1.25	0.138	5.34	0.197	14.1	
$H = 60, V_\infty = 10\ 000, x = 6.7$						$H = 60, V_\infty = 7500, x = 4$					
0	1.76	3.30	0.66	0.210	2.92	1.76	3.36	0.70	0.273	2.61	
0.1	1.70	2.97	0.73	0.210	3.36	1.71	3.02	0.74	0.273	2.96	
0.2	1.64	2.62	0.80	0.210	3.85	1.69	2.66	0.80	0.273	3.36	
0.3	1.59	2.21	0.86	0.210	4.48	1.68	2.20	0.87	0.275	3.92	
0.4	1.54	1.76	0.96	0.210	5.19	1.68	1.81	1.00	0.280	4.44	
0.5	1.51	1.28	1.17	0.212	6.09	1.70	1.53	1.25	0.267	4.93	
0.6	1.50	0.800	1.72	0.216	7.42	1.73	1.19	1.64	0.298	5.70	
0.7	1.51	0.485	2.55	0.228	9.36	1.78	0.860	2.17	0.316	6.68	
0.8	1.53	0.301	3.51	0.246	10.7	1.84	0.550	2.94	0.347	7.76	
0.9	1.57	0.239	4.72	0.275	11.7	1.91	0.390	3.97	0.400	8.55	
1.0	1.61	0.203	6.02	0.313	12.0	2.07	0.338	6.02	0.512	9.07	
$H = 60, V_\infty = 10\ 000, x = 7.3$						$H = 60, V_\infty = 7500, x = 6.7$					
0	1.76	3.30	0.66	0.209	2.93	1.76	3.30	0.618	0.236	2.68	
0.1	1.70	3.01	0.70	0.209	3.32	1.70	2.83	0.670	0.236	2.95	
0.2	1.64	2.62	0.76	0.208	3.84	1.65	2.38	0.735	0.236	3.64	
0.3	1.59	2.17	0.83	0.208	4.28	1.61	1.92	0.835	0.236	4.46	
0.4	1.53	1.68	1.02	0.207	5.28	1.57	1.47	0.980	0.236	5.35	
0.5	1.49	1.09	1.43	0.207	6.98	1.54	1.01	1.26	0.236	6.34	
0.6	1.47	0.692	1.98	0.211	8.56	1.52	0.637	1.71	0.238	7.40	
0.7	1.47	0.449	2.67	0.220	9.88	1.51	0.407	2.35	0.246	8.49	
0.8	1.49	0.299	3.52	0.234	10.8	1.53	0.317	3.08	0.261	9.23	
0.9	1.52	0.220	4.59	0.257	11.6	1.59	0.265	4.10	0.292	9.96	
1.0	1.57	0.194	5.93	0.296	12.2	1.65	0.242	5.26	0.342	10.5	
$H = 60, V_\infty = 10\ 000, x = 13.5$						$H = 60, V_\infty = 7500, x = 9$					
0	1.76	3.32	0.69	0.219	2.90	1.76	3.28	0.589	0.224	2.72	
0.1	1.70	2.81	0.76	0.219	3.57	1.70	2.78	0.615	0.224	3.24	
0.2	1.64	2.22	0.94	0.219	4.52	1.64	2.23	0.757	0.223	3.98	
0.3	1.58	1.56	1.22	0.219	5.67	1.59	1.66	0.980	0.223	4.94	
0.4	1.53	0.850	1.66	0.218	7.00	1.54	1.09	1.28	0.223	6.02	
0.5	1.48	0.400	2.64	0.217	9.60	1.50	0.695	1.63	0.223	7.27	
0.6	1.42	0.225	3.56	0.214	11.4	1.46	0.437	2.13	0.224	8.52	
0.7	1.37	0.211	4.06	0.210	12.2	1.43	0.305	2.73	0.225	9.40	
0.8	1.32	0.187	4.50	0.203	12.8	1.41	0.251	3.40	0.230	9.91	
0.9	1.28	0.159	4.91	0.200	13.5	1.43	0.225	4.15	0.247	10.1	
1.0	1.27	0.142	5.39	0.205	13.9	1.47	0.207	4.98	0.280	11.3	

Table 37 Continued

 $\theta_b = 10^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$
$H = 60, V_\infty = 7500, x = 13.5$										
0	1.76	3.28	0.59	0.226	2.71	1.76	3.04	0.548	0.232	2.72
0.1	1.69	2.54	0.69	0.226	3.12	1.71	2.73	0.602	0.231	3.07
0.2	1.63	1.86	0.86	0.226	4.08	1.66	2.23	0.711	0.231	3.61
0.3	1.58	1.25	1.04	0.226	5.68	1.60	1.80	0.902	0.231	4.18
0.4	1.51	0.705	1.56	0.226	7.40	1.58	1.36	1.01	0.232	5.10
0.5	1.46	0.388	2.46	0.224	8.96	1.56	0.990	1.24	0.234	6.12
0.6	1.41	0.251	3.24	0.223	10.2	1.53	0.628	1.65	0.236	7.05
0.7	1.37	0.205	3.86	0.221	11.2	1.51	0.440	2.20	0.241	8.06
0.8	1.33	0.186	4.29	0.219	11.9	1.52	0.340	2.95	0.253	8.97
0.9	1.30	0.174	4.54	0.219	12.2	1.57	0.271	4.07	0.285	10.2
1.0	1.29	0.173	4.64	0.222	12.2	1.63	0.232	5.29	0.335	10.7
$H = 60, V_\infty = 7500, x = 18.3$										
0	1.76	3.33	0.66	0.256	2.64	1.76	3.02	0.523	0.218	2.74
0.1	1.69	2.52	0.74	0.256	3.76	1.69	2.47	0.579	0.218	3.37
0.2	1.63	1.63	1.08	0.256	5.24	1.62	1.93	0.768	0.218	4.16
0.3	1.58	0.800	1.79	0.255	7.00	1.57	1.34	1.06	0.218	5.33
0.4	1.52	0.338	2.79	0.252	8.95	1.52	0.745	1.44	0.218	6.65
0.5	1.47	0.248	3.77	0.247	10.3	1.46	0.427	1.97	0.217	8.07
0.6	1.42	0.218	4.40	0.240	11.5	1.41	0.311	2.65	0.216	9.36
0.7	1.37	0.190	4.64	0.233	11.9	1.37	0.239	3.29	0.215	10.5
0.8	1.32	0.170	4.70	0.225	12.2	1.34	0.205	3.90	0.215	11.3
0.9	1.28	0.163	4.68	0.218	12.4	1.32	0.181	4.36	0.219	11.9
1.0	1.25	0.168	4.57	0.212	12.4	1.31	0.169	4.77	0.227	12.2
$H = 30, V_\infty = 7500, x = 4$										
0	1.76	3.13	0.661	0.287	2.63	1.76	3.02	0.541	0.222	2.71
0.1	1.73	2.83	0.701	0.285	2.91	1.69	2.37	0.642	0.221	3.42
0.2	1.70	2.54	0.742	0.285	3.21	1.63	1.83	0.821	0.221	4.31
0.3	1.69	2.21	0.809	0.285	3.58	1.56	1.19	1.12	0.221	5.68
0.4	1.70	1.84	0.962	0.289	4.11	1.51	0.760	1.51	0.221	7.06
0.5	1.72	1.49	1.19	0.295	4.82	1.46	0.410	2.16	0.220	8.46
0.6	1.76	1.15	1.54	0.307	5.59	1.40	0.280	2.93	0.218	9.88
0.7	1.82	0.812	1.98	0.329	6.46	1.36	0.220	3.39	0.216	10.8
0.8	1.89	0.563	2.72	0.361	7.39	1.32	0.199	3.92	0.214	11.5
0.9	1.98	0.412	3.97	0.419	8.23	1.30	0.181	4.44	0.215	12.0
1.0	2.13	0.331	5.95	0.534	8.94	1.29	0.171	4.73	0.221	12.4
$H = 30, V_\infty = 7500, x = 6.7$										
0	1.76	3.05	0.561	0.238	2.71	1.76	3.27	1.10	0.576	2.23
0.1	1.71	2.66	0.608	0.237	3.03	1.81	3.12	1.12	0.575	2.74
0.2	1.67	2.23	0.681	0.237	3.47	1.90	2.95	1.16	0.575	2.52
0.3	1.63	1.84	0.778	0.237	4.02	2.02	2.78	1.24	0.575	2.65
0.4	1.60	1.41	0.981	0.238	5.13	2.24	2.61	1.39	0.607	2.65
0.5	1.57	1.05	1.24	0.240	5.95	2.56	2.44	1.66	0.685	3.03
0.6	1.55	0.732	1.55	0.243	6.77	2.97	2.22	2.09	0.805	3.29
0.7	1.54	0.475	2.13	0.249	7.82	3.32	2.00	2.72	0.950	3.65
0.8	1.57	0.350	2.99	0.268	8.94	3.66	1.82	3.66	1.13	4.19
0.9	1.62	0.279	3.97	0.299	9.76	3.97	1.75	5.12	1.41	4.70
1.0	1.69	0.250	5.38	0.354	10.5	4.28	1.71	7.56	1.81	5.22
$H = 30, V_\infty = 6000, x = 1.2$										
0	1.76	3.05	0.561	0.238	2.71	1.76	3.27	1.10	0.576	2.23
0.1	1.71	2.66	0.608	0.237	3.03	1.81	3.12	1.12	0.575	2.74
0.2	1.67	2.23	0.681	0.237	3.47	1.90	2.95	1.16	0.575	2.52
0.3	1.63	1.84	0.778	0.237	4.02	2.02	2.78	1.24	0.575	2.65
0.4	1.60	1.41	0.981	0.238	5.13	2.24	2.61	1.39	0.607	2.65
0.5	1.57	1.05	1.24	0.240	5.95	2.56	2.44	1.66	0.685	3.03
0.6	1.55	0.732	1.55	0.243	6.77	2.97	2.22	2.09	0.805	3.29
0.7	1.54	0.475	2.13	0.249	7.82	3.32	2.00	2.72	0.950	3.65
0.8	1.57	0.350	2.99	0.268	8.94	3.66	1.82	3.66	1.13	4.19
0.9	1.62	0.279	3.97	0.299	9.76	3.97	1.75	5.12	1.41	4.70
1.0	1.69	0.250	5.38	0.354	10.5	4.28	1.71	7.56	1.81	5.22

Table 37 Continued

 $\theta_b = 10^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 30, V_\infty = 6000, x = 2$						$H = 30, V_\infty = 5000, x = 4$					
0	1.76	3.11	0.84	0.424	2.38	1.76	2.88	0.70	0.335	2.50	
0.1	1.78	2.92	0.83	0.426	2.51	1.76	2.60	0.75	0.335	2.80	
0.2	1.81	2.71	0.86	0.430	2.75	1.76	2.31	0.82	0.335	3.12	
0.3	1.85	2.48	0.91	0.436	3.06	1.77	1.98	0.90	0.336	3.55	
0.4	1.91	2.24	1.04	0.444	3.41	1.79	1.64	1.02	0.338	4.06	
0.5	1.97	1.99	1.25	0.458	3.80	1.80	1.30	1.21	0.343	4.56	
0.6	2.06	1.72	1.58	0.476	4.25	1.81	0.947	1.45	0.351	5.12	
0.7	2.25	1.41	2.11	0.533	4.72	1.82	0.680	1.79	0.362	5.72	
0.8	2.57	1.06	2.89	0.646	5.22	1.86	0.532	2.32	0.387	6.35	
0.9	2.88	0.790	3.97	0.824	5.72	1.96	0.468	3.18	0.445	6.97	
1.0	3.20	0.700	5.46	1.12	6.24	2.18	0.436	5.02	0.599	7.60	
$H = 30, V_\infty = 6000, x = 4$						$H = 30, V_\infty = 5000, x = 6.7$					
0	1.76	2.96	0.65	0.313	2.54	1.76	2.77	0.57	0.263	2.74	
0.1	1.74	2.61	0.72	0.313	2.82	1.70	2.41	0.62	0.262	3.13	
0.2	1.72	2.27	0.80	0.313	3.22	1.66	1.95	0.69	0.262	3.55	
0.3	1.71	1.94	0.90	0.313	3.69	1.63	1.52	0.78	0.263	4.03	
0.4	1.71	1.61	1.03	0.313	4.23	1.60	1.17	0.94	0.265	4.67	
0.5	1.73	1.30	1.22	0.315	4.84	1.59	0.884	1.22	0.270	5.41	
0.6	1.75	1.00	1.45	0.321	5.50	1.58	0.646	1.66	0.279	6.29	
0.7	1.79	0.765	1.86	0.340	6.11	1.59	0.480	2.20	0.292	7.16	
0.8	1.86	0.587	2.48	0.369	6.77	1.61	0.395	2.84	0.314	7.92	
0.9	1.94	0.475	3.25	0.428	7.46	1.63	0.344	3.55	0.343	8.52	
1.0	2.16	0.390	4.46	0.571	8.21	1.67	0.310	4.38	0.382	8.94	
$H = 30, V_\infty = 6000, x = 6.7$						$H = 30, V_\infty = 5000, x = 7.3$					
0	1.76	2.85	0.525	0.249	2.66	1.76	2.76	0.55	0.255	2.76	
0.1	1.71	2.52	0.600	0.248	3.00	1.70	2.38	0.60	0.255	3.14	
0.2	1.67	2.15	0.690	0.248	3.50	1.65	2.00	0.67	0.255	3.63	
0.3	1.63	1.74	0.800	0.249	4.22	1.61	1.60	0.76	0.255	4.16	
0.4	1.61	1.32	0.975	0.252	4.92	1.58	1.20	0.93	0.257	4.82	
0.5	1.59	0.940	1.22	0.255	5.70	1.56	0.824	1.22	0.260	5.49	
0.6	1.58	0.640	1.60	0.260	6.53	1.55	0.630	1.60	0.268	6.26	
0.7	1.57	0.470	2.16	0.270	7.48	1.56	0.490	2.10	0.281	7.08	
0.8	1.57	0.375	2.82	0.285	8.34	1.56	0.390	2.74	0.300	7.92	
0.9	1.60	0.315	3.71	0.309	9.10	1.58	0.330	3.58	0.326	8.69	
1.0	1.68	0.270	4.85	0.341	9.68	1.62	0.299	4.31	0.363	9.09	
$H = 30, V_\infty = 6000, x = 13.5$						$H = 30, V_\infty = 5000, x = 13.5$					
0	1.76	2.81	0.485	0.227	2.70	1.76	2.72	0.526	0.238	2.80	
0.1	1.69	2.27	0.615	0.227	3.44	1.68	2.12	0.579	0.238	3.38	
0.2	1.62	1.70	0.790	0.226	4.30	1.61	1.56	0.740	0.238	4.18	
0.3	1.56	1.16	0.985	0.226	5.29	1.54	1.03	1.02	0.237	5.22	
0.4	1.50	0.705	1.24	0.226	6.50	1.48	0.570	1.43	0.236	6.33	
0.5	1.44	0.440	1.56	0.225	7.94	1.42	0.430	1.93	0.234	7.54	
0.6	1.39	0.325	2.00	0.223	8.97	1.37	0.340	2.55	0.232	8.70	
0.7	1.35	0.265	2.63	0.221	9.76	1.35	0.279	2.99	0.231	9.51	
0.8	1.32	0.230	3.35	0.222	10.3	1.35	0.250	3.34	0.234	9.95	
0.9	1.31	0.210	3.85	0.231	10.8	1.34	0.240	3.61	0.244	10.1	
1.0	1.32	0.200	4.27	0.244	11.1	1.33	0.241	3.83	0.262	10.1	

Table 37 Continued

 $\theta_b = 10^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 30, V_\infty = 5000, x = 14.7$						$H = 30, V_\infty = 4000, x = 14.7$					
0	1.76	2.73	0.530	0.241	2.79	1.76	2.64	0.48	0.255	2.68	
0.1	1.71	2.31	0.554	0.241	3.16	1.67	1.98	0.55	0.255	3.13	
0.2	1.61	1.49	0.780	0.240	4.32	1.59	1.44	0.75	0.254	4.04	
0.3	1.54	0.980	1.12	0.240	5.42	1.52	0.951	1.15	0.254	5.34	
0.4	1.47	0.584	1.55	0.238	6.62	1.45	0.595	1.58	0.252	6.46	
0.5	1.41	0.405	2.09	0.236	7.82	1.39	0.440	2.06	0.249	7.50	
0.6	1.36	0.315	2.59	0.232	8.94	1.33	0.369	2.54	0.246	8.20	
0.7	1.32	0.270	2.95	0.230	9.72	1.28	0.324	2.80	0.244	8.65	
0.8	1.29	0.247	3.25	0.230	10.0	1.25	0.308	2.92	0.248	8.88	
0.9	1.28	0.238	3.53	0.236	10.2	1.26	0.300	3.04	0.257	9.00	
1.0	1.29	0.234	3.76	0.250	10.2	1.28	0.297	3.26	0.274	9.03	
$H = 30, V_\infty = 4000, x = 4$						$H = 30, V_\infty = 3000, x = 4$					
0	1.76	2.82	0.649	0.360	2.50	1.76	2.52	0.61	0.386	2.41	
0.1	1.76	2.55	0.670	0.361	2.72	1.74	2.28	0.68	0.386	2.61	
0.2	1.76	2.26	0.729	0.363	2.99	1.72	2.03	0.76	0.387	2.89	
0.3	1.76	1.94	0.825	0.365	3.33	1.71	1.77	0.85	0.389	3.22	
0.4	1.78	1.59	0.978	0.369	3.75	1.70	1.53	0.97	0.394	3.60	
0.5	1.80	1.24	1.17	0.375	4.22	1.71	1.28	1.17	0.403	4.04	
0.6	1.84	1.02	1.38	0.383	4.63	1.73	1.05	1.44	0.417	4.54	
0.7	1.87	0.872	1.64	0.395	5.04	1.76	0.875	1.81	0.439	5.06	
0.8	1.91	0.750	2.04	0.419	5.54	1.85	0.765	2.28	0.481	5.46	
0.9	2.01	0.650	2.71	0.465	6.08	2.00	0.710	2.93	0.565	5.70	
1.0	2.24	0.522	4.53	0.661	6.77	2.25	0.675	3.74	0.731	5.84	
$H = 30, V_\infty = 4000, x = 6.7$						$H = 30, V_\infty = 3000, x = 6.7$					
0	1.76	2.69	0.526	0.283	2.62	1.76	2.39	0.52	0.314	2.54	
0.1	1.69	2.38	0.540	0.283	2.92	1.69	2.06	0.59	0.314	2.88	
0.2	1.64	2.01	0.613	0.283	3.30	1.62	1.74	0.68	0.314	3.28	
0.3	1.62	1.57	0.738	0.284	3.73	1.56	1.43	0.80	0.314	3.75	
0.4	1.59	1.22	0.900	0.288	4.31	1.53	1.15	0.98	0.316	4.30	
0.5	1.58	0.935	1.15	0.292	5.01	1.51	0.930	1.24	0.321	4.88	
0.6	1.57	0.718	1.51	0.301	5.76	1.50	0.760	1.55	0.332	5.48	
0.7	1.58	0.570	1.99	0.317	6.47	1.51	0.640	1.91	0.349	5.97	
0.8	1.61	0.470	2.58	0.343	7.14	1.54	0.583	2.31	0.378	6.31	
0.9	1.66	0.400	3.28	0.382	7.60	1.60	0.543	2.74	0.417	6.55	
1.0	1.72	0.389	3.91	0.431	7.85	1.68	0.520	3.23	0.476	6.71	
$H = 30, V_\infty = 4000, x = 7.3$						$H = 30, V_\infty = 3000, x = 7.3$					
0	1.76	2.68	0.514	0.276	2.64	1.76	2.37	0.51	0.307	2.55	
0.1	1.69	2.34	0.536	0.275	2.90	1.68	2.10	0.59	0.306	2.92	
0.2	1.65	1.95	0.622	0.274	3.30	1.61	1.79	0.69	0.305	3.34	
0.3	1.61	1.53	0.766	0.275	3.82	1.54	1.41	0.83	0.306	3.86	
0.4	1.57	1.14	0.950	0.278	4.46	1.49	1.08	1.04	0.307	4.44	
0.5	1.54	0.858	1.19	0.283	5.19	1.47	0.850	1.38	0.312	5.13	
0.6	1.52	0.681	1.54	0.290	5.90	1.46	0.690	1.69	0.321	5.71	
0.7	1.53	0.545	2.02	0.303	6.63	1.47	0.605	2.03	0.337	6.17	
0.8	1.56	0.449	2.61	0.328	7.33	1.49	0.550	2.40	0.365	6.55	
0.9	1.61	0.390	3.25	0.367	7.76	1.54	0.515	2.77	0.400	6.76	
1.0	1.67	0.377	3.84	0.412	7.97	1.62	0.505	3.15	0.465	6.81	

Table 37 Continued

$\theta_b \cdot 10^{\circ}$	$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$p$	$p \cdot 10$	$\beta$
$H = 30, V_{\infty} = 3000, x = 13.5$						$H = 10, V_{\infty} = 5000, x = 4$					
0	1.76	2.35	0.49	0.293	2.58	1.76	2.75	0.664	0.335	2.66	
0.1	1.65	1.77	0.66	0.292	3.26	1.75	2.49	0.690	0.334	2.92	
0.2	1.56	1.28	0.87	0.291	4.04	1.76	2.21	0.755	0.334	3.20	
0.3	1.46	0.900	1.19	0.290	4.98	1.77	1.92	0.840	0.337	3.50	
0.4	1.38	0.655	1.66	0.237	5.87	1.79	1.62	1.00	0.339	3.91	
0.5	1.31	0.525	1.96	0.283	6.58	1.81	1.29	1.22	0.345	4.41	
0.6	1.26	0.470	2.13	0.281	7.08	1.82	1.02	1.49	0.354	4.95	
0.7	1.22	0.440	2.25	0.283	7.34	1.85	0.800	1.85	0.370	5.59	
0.8	1.20	0.427	2.35	0.288	7.44	1.90	0.628	2.40	0.402	6.34	
0.9	1.22	0.425	2.48	0.300	7.46	2.00	0.500	3.33	0.460	7.00	
1.0	1.26	0.430	2.65	0.322	7.42	2.21	0.438	5.07	0.609	7.57	
$H = 30, V_{\infty} = 3000, x = 14.7$						$H = 10, V_{\infty} = 5000, x = 6.7$					
0	1.76	2.36	0.495	0.297	2.57	1.76	2.63	0.53	0.262	2.76	
0.1	1.65	1.77	0.670	0.297	3.34	1.71	2.31	0.60	0.260	3.10	
0.2	1.55	1.27	0.965	0.296	4.20	1.66	1.94	0.64	0.260	3.49	
0.3	1.46	0.83	1.37	0.294	5.20	1.63	1.58	0.73	0.261	3.96	
0.4	1.37	0.61	1.78	0.289	6.17	1.60	1.24	0.92	0.264	4.51	
0.5	1.30	0.51	2.01	0.284	6.83	1.57	0.929	1.21	0.269	5.28	
0.6	1.24	0.47	2.14	0.280	7.20	1.55	0.665	1.58	0.276	6.17	
0.7	1.19	0.43	2.24	0.279	7.42	1.52	0.510	2.08	0.290	6.99	
0.8	1.18	0.42	2.31	0.281	7.45	1.50	0.393	2.75	0.314	7.79	
0.9	1.18	0.42	2.41	0.289	7.46	1.51	0.315	3.52	0.348	8.44	
1.0	1.21	0.42	2.58	0.312	7.50	1.70	0.312	4.45	0.390	8.91	
$H = 10, V_{\infty} = 5000, x = 1.2$						$H = 10, V_{\infty} = 5000, x = 13.5$					
0	1.76	3.08	1.11	0.623	2.22	1.76	2.58	0.491	0.234	2.81	
0.1	1.79	2.95	1.12	0.624	2.40	1.59	2.06	0.547	0.234	3.34	
0.2	1.83	2.80	1.18	0.620	2.57	1.63	1.55	0.710	0.233	4.01	
0.3	2.00	2.63	1.30	0.632	2.72	1.56	1.04	0.965	0.233	4.99	
0.4	2.26	2.46	1.42	0.689	2.88	1.49	0.576	1.33	0.232	5.13	
0.5	2.58	2.27	1.65	0.778	3.00	1.43	0.475	1.80	0.231	7.29	
0.6	3.00	2.06	2.05	0.908	3.20	1.38	0.354	2.40	0.229	8.53	
0.7	3.38	1.86	2.62	1.06	3.44	1.33	0.285	2.88	0.229	9.39	
0.8	3.72	1.64	3.44	1.26	3.78	1.31	0.245	3.26	0.233	9.86	
0.9	4.04	1.40	4.75	1.54	4.18	1.31	0.222	3.56	0.243	10.0	
1.0	4.32	1.16	6.67	1.89	4.60	1.33	0.238	3.88	0.262	10.1	
$H = 10, V_{\infty} = 5000, x = 2$						$H = 10, V_{\infty} = 3000, x = 4$					
0	1.76	2.95	0.918	0.493	2.38	1.76	2.45	0.616	0.383	2.45	
0.1	1.79	2.75	0.930	0.494	2.62	1.73	2.22	0.670	0.381	2.56	
0.2	1.81	2.54	0.960	0.494	2.84	1.71	1.98	0.739	0.383	2.86	
0.3	1.85	2.30	1.02	0.492	3.07	1.70	1.74	0.837	0.386	3.27	
0.4	1.90	2.07	1.25	0.491	3.32	1.70	1.49	0.990	0.391	3.68	
0.5	1.96	1.82	1.26	0.492	3.62	1.72	1.26	1.17	0.399	4.07	
0.6	2.09	1.58	1.48	0.524	3.95	1.74	1.05	1.41	0.414	4.50	
0.7	2.31	1.33	1.88	0.585	4.32	1.78	0.895	1.74	0.434	4.98	
0.8	2.62	1.11	2.56	0.703	4.72	1.85	0.778	2.15	0.475	5.41	
0.9	2.96	0.913	3.80	0.882	5.17	2.00	0.708	2.84	0.562	5.70	
1.0	3.25	0.762	5.99	1.17	5.74	2.25	0.661	3.87	0.727	5.88	

Table 37 Continued

 $\theta_b = 10^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$
$H = 10, V_\infty = 3000, x = 6.7$										
0	1.76	2.33	0.524	0.311	2.57	1.76	3.16	0.71	0.308	2.58
0.1	1.68	2.03	0.600	0.307	2.90	1.75	2.99	0.72	0.309	2.78
0.2	1.62	1.73	0.692	0.307	3.32	1.76	2.81	0.74	0.309	2.93
0.3	1.56	1.42	0.815	0.311	3.80	1.78	2.60	0.80	0.312	3.19
0.4	1.52	1.13	1.00	0.315	4.36	1.81	2.39	0.88	0.316	3.40
0.5	1.50	0.900	1.26	0.321	4.95	1.85	2.19	0.96	0.323	3.64
0.6	1.50	0.730	1.58	0.331	5.54	1.88	1.85	1.12	0.332	4.04
0.7	1.51	0.625	1.96	0.348	6.06	1.91	1.19	1.70	0.343	5.56
0.8	1.53	0.562	2.36	0.372	6.46	1.93	0.68	2.44	0.375	6.94
0.9	1.58	0.521	2.79	0.409	6.75	2.01	0.47	3.68	0.426	7.88
1.0	1.68	0.511	3.23	0.472	6.77	2.09	0.33	5.92	0.520	9.04
$H = 10, V_\infty = 3000, x = 7.3$										
0	1.76	2.31	0.514	0.304	2.59	1.76	3.06	0.58	0.245	2.70
0.1	1.67	1.97	0.580	0.304	2.96	1.71	2.84	0.60	0.245	2.94
0.2	1.60	1.66	0.681	0.304	3.38	1.67	2.61	0.64	0.245	3.20
0.3	1.54	1.35	0.838	0.304	3.87	1.63	2.34	0.68	0.245	3.48
0.4	1.50	1.07	1.03	0.306	4.46	1.60	2.09	0.72	0.244	3.77
0.5	1.47	0.847	1.30	0.310	5.10	1.56	1.73	0.86	0.246	4.24
0.6	1.45	0.695	1.61	0.320	5.68	1.55	1.04	1.30	0.246	5.90
0.7	1.46	0.590	1.95	0.336	6.16	1.57	0.585	1.89	0.254	7.37
0.8	1.49	0.540	2.32	0.361	6.52	1.62	0.390	2.78	0.279	8.49
0.9	1.54	0.520	2.71	0.395	6.77	1.66	0.290	4.17	0.320	9.67
1.0	1.60	0.492	3.13	0.441	6.90	1.70	0.248	5.41	0.360	10.4
$H = 10, V_\infty = 3000, x = 13.5$										
0	1.76	2.29	0.501	0.293	2.61	1.76	3.05	0.56	0.237	2.72
0.1	1.65	1.75	0.630	0.293	3.22	1.71	2.81	0.60	0.237	2.97
0.2	1.56	1.29	0.780	0.292	4.02	1.66	2.57	0.62	0.237	3.24
0.3	1.47	0.900	1.15	0.290	4.96	1.62	2.30	0.66	0.238	3.54
0.4	1.39	0.627	1.60	0.286	6.00	1.58	2.03	0.72	0.238	3.84
0.5	1.32	0.514	1.86	0.282	6.66	1.56	1.62	0.88	0.236	4.40
0.6	1.26	0.464	2.06	0.279	7.09	1.54	0.910	1.36	0.238	6.36
0.7	1.22	0.437	2.23	0.279	7.35	1.53	0.520	1.96	0.243	7.66
0.8	1.21	0.424	2.39	0.287	7.48	1.56	0.355	2.88	0.263	8.86
0.9	1.22	0.422	2.53	0.299	7.51	1.62	0.275	4.16	0.302	9.96
1.0	1.26	0.421	2.67	0.322	7.51	1.66	0.238	5.34	0.342	10.6
$H = 10, V_\infty = 3000, x = 14.7$										
0	1.76	2.30	0.503	0.297	2.60	1.76	3.00	0.50	0.209	2.78
0.1	1.65	1.72	0.655	0.297	3.31	1.70	2.68	0.54	0.209	3.25
0.2	1.55	1.21	0.900	0.296	4.19	1.63	2.31	0.60	0.209	3.60
0.3	1.47	0.845	1.24	0.293	5.14	1.57	1.88	0.69	0.209	4.06
0.4	1.39	0.605	1.71	0.289	6.22	1.51	1.27	0.96	0.208	5.25
0.5	1.31	0.500	1.98	0.284	6.83	1.46	0.535	1.65	0.208	7.65
0.6	1.25	0.452	2.15	0.278	7.26	1.41	0.335	2.40	0.208	9.15
0.7	1.20	0.429	2.29	0.276	7.56	1.37	0.245	3.23	0.209	10.5
0.8	1.18	0.411	2.41	0.280	7.66	1.34	0.210	3.79	0.212	11.2
0.9	1.19	0.410	2.51	0.290	7.66	1.32	0.185	4.25	0.218	11.8
1.0	1.21	0.413	2.61	0.309	7.59	1.32	0.173	4.78	0.229	12.2
$H = 30, V_\infty = 7500, R = 0, x = 4.89$										
0	1.76	3.06	0.58	0.245	2.70	1.76	3.06	0.58	0.245	2.70
0.1	1.67	2.84	0.60	0.245	2.94	1.71	2.84	0.60	0.245	2.94
0.2	1.60	2.61	0.64	0.245	3.20	1.67	2.34	0.68	0.245	3.48
0.3	1.54	2.34	0.68	0.245	3.54	1.63	2.03	0.72	0.244	3.77
0.4	1.50	2.09	0.72	0.244	4.06	1.60	1.72	0.86	0.246	4.24
0.5	1.47	1.73	0.86	0.246	4.40	1.56	1.40	1.30	0.246	5.90
0.6	1.45	1.46	0.95	0.254	5.89	1.55	1.04	1.30	0.254	7.37
0.7	1.46	1.21	1.05	0.264	6.16	1.57	0.585	1.89	0.254	8.49
0.8	1.49	1.04	1.22	0.287	7.48	1.62	0.355	2.88	0.263	9.67
0.9	1.54	0.92	1.41	0.299	7.51	1.66	0.275	4.16	0.302	10.6
1.0	1.60	0.81	1.61	0.322	7.51	1.70	0.238	5.34	0.342	11.6
$H = 30, V_\infty = 7500, R = 0, x = 5.37$										
0	1.76	3.05	0.56	0.237	2.72	1.76	3.05	0.56	0.237	2.72
0.1	1.65	2.81	0.60	0.237	2.97	1.71	2.81	0.60	0.237	2.97
0.2	1.60	2.61	0.62	0.237	3.24	1.66	2.57	0.62	0.237	3.24
0.3	1.54	2.34	0.66	0.238	3.54	1.62	2.30	0.66	0.238	3.54
0.4	1.50	2.09	0.72	0.238	4.06	1.58	2.03	0.72	0.238	3.84
0.5	1.47	1.73	0.86	0.246	4.40	1.56	1.40	1.30	0.246	5.90
0.6	1.45	1.46	0.95	0.254	5.89	1.55	1.04	1.30	0.254	7.37
0.7	1.46	1.21	1.05	0.264	6.16	1.57	0.585	1.89	0.254	8.49
0.8	1.49	1.04	1.22	0.287	7.48	1.62	0.355	2.88	0.263	9.67
0.9	1.54	0.92	1.41	0.299	7.51	1.66	0.275	4.16	0.302	10.6
1.0	1.60	0.81	1.61	0.322	7.51	1.70	0.238	5.34	0.342	11.6
$H = 30, V_\infty = 7500, R = 0, x = 10.3$										
0	1.76	3.00	0.50	0.209	2.78	1.76	3.00	0.50	0.209	2.78
0.1	1.65	2.68	0.54	0.209	3.25	1.70	2.68	0.54	0.209	3.25
0.2	1.60	2.31	0.60	0.209	3.60	1.63	2.31	0.60	0.209	3.60
0.3	1.57	1.88	0.69	0.209	4.06	1.57	1.88	0.69	0.209	4.06
0.4	1.51	1.27	0.96	0.208	5.25	1.51	1.27	0.96	0.208	5.25
0.5	1.46	0.535	1.65	0.208	7.65	1.46	0.535	1.65	0.208	7.65
0.6	1.41	0.335	2.40	0.208	9.15	1.41	0.335	2.40	0.208	9.15
0.7	1.37	0.245	3.23	0.209	10.5	1.37	0.245	3.23	0.209	10.5
0.8	1.34	0.210	3.79	0.212	11.2	1.34	0.210	3.79	0.212	11.2
0.9	1.32	0.185	4.25	0.218	11.8	1.32	0.185	4.25	0.218	11.8
1.0	1.32	0.173	4.78	0.229	12.2	1.32	0.173	4.78	0.229	12.2

Table 37 Continued

$\theta_b = 10^\circ$

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$
$H = 30, V_\infty = 7500, \bar{R} = 0, x = 10.5$										
0	1.76	3.00	0.506	0.209	2.78	1.75	3.00	0.50	0.209	2.78
0.1	1.69	2.66	0.540	0.209	3.16	1.69	2.65	0.54	0.209	3.20
0.2	1.63	2.30	0.600	0.209	3.54	1.63	2.20	0.62	0.210	3.72
0.3	1.57	1.87	0.700	0.209	4.08	1.57	1.70	0.76	0.210	4.36
0.4	1.51	1.35	1.00	0.209	5.38	1.51	1.18	1.04	0.209	5.30
0.5	1.45	0.49	1.62	0.208	7.80	1.46	0.570	1.56	0.209	7.30
0.6	1.41	0.32	2.48	0.208	9.28	1.41	0.330	2.45	0.209	9.40
0.7	1.37	0.24	3.28	0.209	10.5	1.37	0.240	3.44	0.209	10.7
0.8	1.34	0.20	3.80	0.212	11.3	1.34	0.200	3.80	0.211	11.4
0.9	1.33	0.19	4.26	0.218	11.8	1.32	0.190	4.23	0.218	11.8
1.0	1.31	0.17	4.76	0.227	12.3	1.32	0.173	4.78	0.230	12.2
$H = 30, V_\infty = 7500, \bar{R} = 0.2, x = 2.98$										
0	1.76	3.15	0.704	0.304	2.59	1.76	3.00	0.51	0.211	2.77
0.1	1.76	2.97	0.720	0.303	2.78	1.69	2.60	0.59	0.211	3.24
0.2	1.76	2.75	0.770	0.305	3.00	1.62	2.15	0.68	0.211	3.82
0.3	1.76	2.53	0.820	0.309	3.26	1.56	1.64	0.80	0.211	4.52
0.4	1.78	2.28	0.910	0.316	3.55	1.50	1.00	1.16	0.211	5.66
0.5	1.82	2.00	1.00	0.323	3.86	1.45	0.485	1.80	0.211	7.85
0.6	1.86	1.64	1.26	0.334	4.35	1.40	0.280	2.74	0.210	9.79
0.7	1.90	1.14	1.78	0.350	5.75	1.35	0.215	3.70	0.209	11.2
0.8	1.94	0.700	2.52	0.374	6.98	1.32	0.195	3.93	0.210	11.6
0.9	1.99	0.440	3.74	0.420	8.00	1.30	0.180	4.28	0.213	12.0
1.0	2.15	0.352	5.99	0.544	8.90	1.29	0.169	4.73	0.221	12.4
$H = 30, V_\infty = 7500, \bar{R} = 0.2, x = 5.24$										
0	1.76	3.06	0.57	0.241	2.71	1.76	3.14	0.68	0.295	2.60
0.1	1.71	2.79	0.60	0.241	2.82	1.75	2.90	0.71	0.294	2.86
0.2	1.67	2.51	0.64	0.241	3.17	1.74	2.67	0.76	0.295	3.12
0.3	1.63	2.19	0.70	0.241	3.60	1.75	2.42	0.80	0.299	3.37
0.4	1.60	1.86	0.80	0.241	4.16	1.75	2.14	0.88	0.305	3.65
0.5	1.57	1.45	0.98	0.243	4.82	1.77	1.84	1.00	0.312	4.06
0.6	1.56	0.935	1.30	0.247	5.80	1.82	1.40	1.40	0.324	4.96
0.7	1.57	0.455	1.92	0.254	7.44	1.87	0.93	1.91	0.342	6.20
0.8	1.60	0.350	2.85	0.279	8.52	1.92	0.63	2.60	0.371	7.13
0.9	1.66	0.290	4.14	0.317	9.72	1.98	0.44	3.70	0.418	8.02
1.0	1.71	0.250	5.43	0.364	10.3	2.14	0.35	5.98	0.537	8.90
$H = 30, V_\infty = 7500, \bar{R} = 0.2, x = 5.74$										
0	1.76	3.04	0.56	0.234	2.72	1.76	3.05	0.57	0.240	2.70
0.1	1.71	2.78	0.60	0.234	2.98	1.72	2.75	0.61	0.240	3.02
0.2	1.66	2.52	0.64	0.234	3.28	1.67	2.46	0.65	0.240	3.36
0.3	1.62	2.45	0.70	0.234	3.64	1.64	2.13	0.73	0.240	3.75
0.4	1.59	1.90	0.77	0.235	4.10	1.61	1.77	0.85	0.241	4.30
0.5	1.56	1.46	0.97	0.235	4.85	1.58	1.35	1.05	0.242	5.14
0.6	1.54	1.00	1.35	0.237	6.25	1.55	0.82	1.42	0.244	6.46
0.7	1.53	0.560	2.23	0.244	7.96	1.55	0.53	2.02	0.252	7.79
0.8	1.56	0.385	3.15	0.262	9.26	1.59	0.38	2.82	0.274	8.82
0.9	1.61	0.290	4.24	0.300	10.0	1.65	0.28	4.10	0.310	9.75
1.0	1.67	0.241	5.36	0.348	10.5	1.71	0.25	5.43	0.364	10.3

Table 37 Concluded

 $\theta_b = 10^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 30, V_\infty = 7500, \bar{R} = 0.5, x = 6.31$						$H = 30, V_\infty = 5000, \bar{R} = 0, x = 4.98$					
0	1.76	3.04	0.55	0.233	2.72	1.76	2.77	0.575	0.265	2.74	
0.1	1.71	2.74	0.60	0.233	3.07	1.70	2.56	0.597	0.264	3.00	
0.2	1.66	2.42	0.64	0.233	3.43	1.64	2.31	0.640	0.264	3.29	
0.3	1.62	2.08	0.71	0.233	3.82	1.61	2.05	0.682	0.265	3.58	
0.4	1.59	1.65	0.84	0.234	4.40	1.59	1.75	0.760	0.267	3.94	
0.5	1.56	1.22	1.08	0.235	5.42	1.58	1.38	0.880	0.270	4.50	
0.6	1.53	0.765	1.55	0.237	6.80	1.59	0.84	1.34	0.281	5.35	
0.7	1.52	0.445	2.18	0.242	8.04	1.61	0.56	2.03	0.295	6.59	
0.8	1.54	0.340	2.94	0.259	9.10	1.64	0.43	2.74	0.316	7.65	
0.9	1.50	0.270	4.10	0.294	10.0	1.66	0.34	3.55	0.344	8.46	
1.0	1.66	0.239	5.35	0.344	10.5	1.68	0.31	4.40	0.385	8.91	
$H = 30, V_\infty = 7500, \bar{R} = 0.5, x = 11.8$						$H = 30, V_\infty = 5000, \bar{R} = 0, x = 5.47$					
0	1.76	3.00	0.51	0.212	2.77	1.76	2.76	0.56	0.257	2.75	
0.1	1.69	2.60	0.58	0.212	3.26	1.69	2.51	0.60	0.257	3.06	
0.2	1.63	2.12	0.65	0.212	3.84	1.64	2.26	0.64	0.256	3.36	
0.3	1.57	1.56	0.82	0.212	4.58	1.59	1.99	0.68	0.256	3.66	
0.4	1.51	0.965	1.14	0.212	5.90	1.56	1.66	0.75	0.257	4.06	
0.5	1.46	0.530	1.72	0.212	7.76	1.54	1.26	0.91	0.260	4.64	
0.6	1.40	0.320	2.58	0.212	9.40	1.54	0.730	1.29	0.265	5.70	
0.7	1.37	0.260	3.25	0.211	10.5	1.55	0.510	1.89	0.285	7.0	
0.8	1.34	0.215	3.80	0.213	11.3	1.59	0.408	2.60	0.307	7.93	
0.9	1.32	0.185	4.32	0.219	11.9	1.51	0.330	3.62	0.334	8.72	
1.0	1.32	0.173	4.78	0.229	12.2	1.62	0.299	4.31	0.363	9.09	
$H = 30, V_\infty = 7500, \bar{R} = 0.5, x = 12.9$						$H = 30, V_\infty = 5000, \bar{R} = 0, x = 10.5$					
0	1.76	3.01	0.51	0.215	2.76	1.76	2.71	0.51	0.230	2.82	
0.1	1.69	2.62	0.60	0.215	3.14	1.68	2.36	0.55	0.230	3.23	
0.2	1.63	2.11	0.70	0.215	3.79	1.60	1.94	0.62	0.230	3.70	
0.3	1.56	1.43	0.85	0.215	4.70	1.53	1.45	0.77	0.229	4.30	
0.4	1.50	0.860	1.24	0.214	6.22	1.47	0.878	1.00	0.229	5.50	
0.5	1.45	0.445	1.96	0.214	8.24	1.42	0.440	1.96	0.228	7.33	
0.6	1.40	0.275	2.92	0.213	9.92	1.37	0.320	2.49	0.227	8.75	
0.7	1.36	0.210	3.72	0.212	11.2	1.32	0.270	2.93	0.227	9.75	
0.8	1.32	0.190	3.96	0.211	11.6	1.29	0.248	3.16	0.229	9.93	
0.9	1.30	0.175	4.35	0.214	12.1	1.30	0.240	3.42	0.239	9.95	
1.0	1.29	0.169	4.73	0.221	12.3	1.33	0.241	3.83	0.262	10.1	
$H = 30, V_\infty = 5000, \bar{R} = 0, x = 2.8$						$H = 30, V_\infty = 5000, \bar{R} = 0, x = 11.4$					
0	1.76	2.92	0.743	0.359	2.55	1.76	2.71	0.51	0.232	2.82	
0.1	1.78	2.73	0.780	0.358	2.76	1.68	2.31	0.57	0.232	3.2	
0.2	1.80	2.53	0.818	0.358	2.99	1.61	1.87	0.64	0.231	3.1	
0.3	1.83	2.31	0.865	0.358	3.24	1.54	1.36	0.76	0.231	4.7	
0.4	1.85	2.07	0.920	0.360	3.51	1.47	0.695	1.10	0.230	5.7	
0.5	1.87	1.80	1.00	0.363	3.82	1.41	0.445	2.14	0.228	7.5	
0.6	1.86	1.47	1.22	0.366	4.38	1.36	0.300	2.75	0.226	8.1	
0.7	1.85	0.890	1.62	0.371	5.29	1.31	0.265	2.96	0.225	8.4	
0.8	1.87	0.641	2.27	0.392	6.23	1.28	0.259	3.20	0.226	8.7	
0.9	1.99	0.530	3.30	0.452	7.02	1.26	0.245	3.42	0.231	9.7	
1.0	2.16	0.429	5.00	0.583	7.65	1.28	0.233	3.76	0.249	10.7	

Table 38

 $\theta_b = 15^\circ, Y = 1.4$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$
$M_\infty = \infty, x = 1$									
0	2.67	2.53	0.85	2.67	2.21	0.530	2.67	2.15	0.470
0.1	2.65	2.43	0.85	2.59	1.88	0.530	2.57	1.93	0.469
0.2	2.60	2.30	0.84	2.51	1.56	0.530	2.48	1.69	0.469
0.3	2.55	2.21	0.85	2.43	1.25	0.530	2.38	1.45	0.469
0.4	2.97	2.15	0.94	2.36	0.920	0.527	2.30	1.17	0.468
0.5	3.33	2.10	1.10	2.28	0.650	0.524	2.22	0.925	0.467
0.6	3.66	2.01	1.25	2.21	0.465	0.518	2.15	0.728	0.465
0.7	3.95	1.87	1.42	2.14	0.325	0.504	2.10	0.551	0.465
0.8	4.21	1.69	1.60	2.06	0.280	0.484	2.06	0.435	0.468
0.9	4.45	1.48	1.85	1.99	0.260	0.455	2.03	0.365	0.483
1.0	4.67	1.26	2.17	1.93	0.253	0.434	2.03	0.342	0.508
$M_\infty = \infty, x = 1.8$									
0	2.67	2.36	0.671	2.67	2.56	0.863	2.67	2.25	0.951
0.1	2.64	2.21	0.568	2.63	2.46	0.859	2.59	1.91	0.552
0.2	2.62	2.07	0.666	2.60	2.35	0.855	2.51	1.59	0.551
0.3	2.50	1.93	0.665	2.66	2.26	0.880	2.42	1.23	0.549
0.4	2.59	1.76	0.663	3.01	2.21	0.575	2.34	0.905	0.547
0.5	2.58	1.60	0.662	3.36	2.15	1.12	2.27	0.644	0.541
0.6	2.59	1.41	0.670	3.57	2.05	1.27	2.19	0.469	0.532
0.7	2.54	1.24	0.695	3.94	1.92	1.44	2.11	0.381	0.515
0.8	2.91	1.07	0.836	4.19	1.73	1.62	2.03	0.330	0.490
0.9	3.18	0.915	1.06	4.43	1.54	1.87	1.96	0.305	0.465
1.0	3.46	0.752	1.29	4.66	1.32	2.20	1.89	0.306	0.447
$M_\infty = \infty, x = 3.3$									
0	2.67	2.18	0.505	2.67	2.40	0.687	2.67	2.46	0.743
0.1	2.62	2.02	0.505	2.64	2.26	0.682	2.65	1.71	0.744
0.2	2.55	1.84	0.505	2.60	2.12	0.680	2.62	1.01	0.743
0.3	2.50	1.66	0.505	2.58	1.97	0.680	2.59	0.500	0.744
0.4	2.46	1.46	0.505	2.56	1.81	0.675	2.56	0.362	0.736
0.5	2.42	1.25	0.509	2.56	1.63	0.678	2.53	0.349	0.728
0.6	2.40	1.04	0.518	2.61	1.47	0.697	2.50	0.365	0.718
0.7	2.38	0.855	0.530	2.74	1.31	0.744	2.47	0.399	0.707
0.8	2.37	0.673	0.549	2.94	1.14	0.845	2.43	0.415	0.694
0.9	2.37	0.530	0.580	3.18	0.970	1.05	2.39	0.420	0.679
1.0	2.49	0.412	0.707	3.46	0.818	1.32	2.35	0.431	0.661
$M_\infty = \infty, x = 6.2$									
0	2.67	2.11	0.450	2.67	2.22	0.522	2.67	2.51	0.878
0.1	2.59	1.89	0.450	2.51	2.04	0.521	2.61	2.53	0.865
0.2	2.50	1.66	0.450	2.50	1.88	0.520	2.58	2.44	0.867
0.3	2.39	1.43	0.450	2.47	1.69	0.521	2.69	2.36	0.916
0.4	2.31	1.15	0.450	2.44	1.49	0.523	3.00	2.27	1.00
0.5	2.24	0.930	0.448	2.41	1.28	0.527	3.34	2.17	1.13
0.6	2.18	0.715	0.446	2.38	1.08	0.535	3.66	2.06	1.30
0.7	2.13	0.550	0.446	2.35	0.890	0.549	3.94	1.94	1.48
0.8	2.08	0.395	0.450	2.34	0.710	0.565	4.19	1.80	1.69
0.9	2.06	0.310	0.453	2.35	0.571	0.602	4.43	1.61	1.92
1.0	2.06	0.286	0.490	2.50	0.477	0.739	4.64	1.40	2.22
$M_\infty = 23, x = 1$									
0	2.67	2.22	0.522	2.67	2.51	0.878			
0.1	2.59	2.04	0.521	2.61	2.53	0.865			
0.2	2.50	1.88	0.520	2.58	2.44	0.867			
0.3	2.39	1.69	0.521	2.69	2.36	0.916			
0.4	2.31	1.49	0.523	3.00	2.27	1.00			
0.5	2.24	1.28	0.527	3.34	2.17	1.13			
0.6	2.18	1.08	0.535	3.66	2.06	1.30			
0.7	2.13	0.890	0.549	3.94	1.94	1.48			
0.8	2.08	0.710	0.565	4.19	1.80	1.69			
0.9	2.06	0.571	0.602	4.43	1.61	1.92			
1.0	2.06	0.477	0.739	4.64	1.40	2.22			
$M_\infty = 23, x = 10$									
0	2.67	2.56	0.863	2.59	1.91	0.552			
0.1	2.63	2.46	0.859	2.51	1.59	0.551			
0.2	2.60	2.35	0.855	2.42	1.23	0.549			
0.3	2.66	2.26	0.880	2.34	0.905	0.547			
0.4	3.01	2.21	0.575	2.27	0.644	0.541			
0.5	3.36	2.15	1.12	2.19	0.469	0.532			
0.6	3.57	2.05	1.27	2.11	0.381	0.515			
0.7	3.94	1.92	1.44	2.03	0.330	0.490			
0.8	4.19	1.73	1.62	2.03	0.330	0.490			
0.9	4.43	1.54	1.87	1.96	0.305	0.465			
1.0	4.66	1.32	2.20	1.89	0.306	0.447			
$M_\infty = 23, x = 20$									
0	2.67	2.40	0.687	2.67	2.46	0.743			
0.1	2.64	2.26	0.682	2.65	1.71	0.744			
0.2	2.60	2.12	0.680	2.62	1.01	0.743			
0.3	2.58	1.97	0.680	2.59	0.500	0.744			
0.4	2.56	1.81	0.675	2.56	0.362	0.736			
0.5	2.53	1.63	0.678	2.53	0.349	0.728			
0.6	2.50	1.47	0.697	2.50	0.365	0.718			
0.7	2.47	1.31	0.744	2.47	0.399	0.707			
0.8	2.43	1.14	0.845	2.43	0.415	0.694			
0.9	2.39	0.970	1.05	2.39	0.420	0.679			
1.0	2.35	0.818	1.32	2.35	0.431	0.661			
$M_\infty = 23, x = 3.3$									
0	2.67	2.40	0.687	2.67	2.46	0.743			
0.1	2.64	2.26	0.682	2.65	1.71	0.744			
0.2	2.60	2.12	0.680	2.62	1.01	0.743			
0.3	2.58	1.97	0.680	2.59	0.500	0.744			
0.4	2.56	1.81	0.675	2.56	0.362	0.736			
0.5	2.53	1.63	0.678	2.53	0.349	0.728			
0.6	2.50	1.47	0.697	2.50	0.365	0.718			
0.7	2.47	1.31	0.744	2.47	0.399	0.707			
0.8	2.43	1.14	0.845	2.43	0.415	0.694			
0.9	2.39	0.970	1.05	2.39	0.420	0.679			
1.0	2.35	0.818	1.32	2.35	0.431	0.661			
$M_\infty = 15, x = 1$									
0	2.67	2.22	0.522	2.67	2.51	0.878			
0.1	2.59	2.04	0.521	2.61	2.53	0.865			
0.2	2.50	1.88	0.520	2.58	2.44	0.867			
0.3	2.39	1.69	0.521	2.69	2.36	0.916			
0.4	2.31	1.49	0.523	3.00	2.27	1.00			
0.5	2.24	1.28	0.527	3.34	2.17	1.13			
0.6	2.18	1.08	0.535	3.66	2.06	1.30			
0.7	2.13	0.890	0.549	3.94	1.94	1.48			
0.8	2.08	0.710	0.565	4.19	1.80	1.69			
0.9	2.06	0.571	0.602	4.43	1.61	1.92			
1.0	2.06	0.477	0.739	4.64	1.40	2.22			
$M_\infty = 15, x = 10$									
0	2.67	2.56	0.863	2.59	1.91	0.552			
0.1	2.63	2.46	0.859	2.51	1.59	0.551			
0.2	2.60	2.35	0.855	2.42	1.23	0.549			
0.3	2.66	2.26	0.880	2.34	0.905	0.547			
0.4	3.01	2.21	0.575	2.27	0.644	0.541			
0.5	3.36	2.15	1.12	2.19	0.469	0.532			
0.6	3.57	2.05	1.27	2.11	0.381	0.515			
0.7	3.94	1.92	1.44	2.03	0.330	0.490			
0.8	4.19	1.73	1.62	2.03	0.330	0.490			
0.9	4.43	1.54	1.87	1.96	0.305	0.465			
1.0	4.66	1.32	2.20	1.89	0.306	0.447			

Table 38 Continued

 $\theta_b = 15^\circ, \gamma = 1.4$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$
$M_\infty = 15, x = 2$				$M_\infty = 15, x = 20$				$M_\infty = 10, x = 6$	
0	2.67	2.42	0.675	2.67	2.50	0.764	2.67	2.35	0.560
0.1	2.62	2.28	0.671	2.64	1.63	0.761	2.56	2.06	0.556
0.2	2.59	2.12	0.670	2.61	0.95	0.760	2.44	1.77	0.556
0.3	2.56	1.95	0.670	2.57	0.49	0.757	2.33	1.50	0.556
0.4	2.53	1.78	0.670	2.54	0.44	0.751	2.23	1.23	0.555
0.5	2.51	1.60	0.670	2.50	0.43	0.743	2.15	1.00	0.551
0.6	2.50	1.41	0.671	2.47	0.45	0.733	2.07	0.810	0.548
0.7	2.53	1.23	0.692	2.43	0.47	0.721	2.01	0.693	0.547
0.8	2.69	1.07	0.800	2.39	0.48	0.706	1.97	0.630	0.551
0.9	3.02	0.940	0.975	2.34	0.49	0.690	1.95	0.590	0.560
1.0	3.26	0.825	1.23	2.29	0.49	0.668	1.95	0.579	0.585
$M_\infty = 15, x = 3$				$M_\infty = 10, x = 1$				$M_\infty = 10, x = 10$	
0	2.67	2.30	0.566	2.67	2.71	0.913	2.67	2.46	0.652
0.1	2.60	2.13	0.565	2.62	2.60	0.903	2.58	1.96	0.652
0.2	2.53	1.95	0.564	2.57	2.49	0.900	2.48	1.52	0.651
0.3	2.49	1.76	0.566	2.60	2.38	0.900	2.39	1.15	0.643
0.4	2.44	1.57	0.568	3.00	2.36	1.05	2.29	0.850	0.640
0.5	2.41	1.37	0.571	3.35	2.31	1.23	2.20	0.688	0.626
0.6	2.38	1.15	0.576	3.64	2.20	1.37	2.11	0.613	0.606
0.7	2.35	0.965	0.585	3.92	2.06	1.54	2.01	0.580	0.578
0.8	2.36	0.790	0.614	4.16	1.91	1.74	1.92	0.560	0.552
0.9	2.42	0.570	0.678	4.39	1.74	1.99	1.84	0.543	0.528
1.0	2.62	0.601	0.847	4.61	1.57	2.29	1.78	0.536	0.512
$M_\infty = 15, x = 6$				$M_\infty = 10, x = 2$				$M_\infty = 10, x = 20$	
0	2.67	2.22	0.497	2.67	2.53	0.716	2.67	2.61	0.802
0.1	2.56	1.97	0.496	2.62	2.32	0.714	2.63	1.64	0.802
0.2	2.45	1.72	0.496	2.56	2.21	0.713	2.58	0.845	0.800
0.3	2.37	1.47	0.495	2.52	2.05	0.711	2.54	0.631	0.796
0.4	2.28	1.20	0.494	2.49	1.87	0.711	2.49	0.600	0.789
0.5	2.19	0.940	0.493	2.46	1.67	0.710	2.45	0.600	0.779
0.6	2.13	0.740	0.493	2.43	1.49	0.709	2.40	0.614	0.767
0.7	2.07	0.600	0.493	2.53	1.33	0.760	2.35	0.635	0.754
0.8	2.03	0.495	0.499	2.73	1.21	0.873	2.30	0.648	0.736
0.9	2.02	0.430	0.512	2.96	1.09	1.04	2.24	0.647	0.715
1.0	2.02	0.420	0.538	3.24	1.00	1.30	2.17	0.642	0.591
$M_\infty = 15, x = 10$				$M_\infty = 10, x = 3$				$M_\infty = 6, x = 1$	
0	2.67	2.32	0.583	2.67	2.42	0.614	2.67	3.03	1.02
0.1	2.59	1.96	0.584	2.59	2.22	0.612	2.58	2.91	1.02
0.2	2.49	1.65	0.583	2.51	2.02	0.612	2.52	2.81	1.01
0.3	2.41	1.19	0.581	2.44	1.80	0.612	2.62	2.72	1.06
0.4	2.32	0.840	0.577	2.38	1.58	0.615	2.98	2.70	1.22
0.5	2.24	0.625	0.570	2.35	1.39	0.620	3.32	2.65	1.38
0.6	2.16	0.490	0.555	2.32	1.21	0.628	3.59	2.56	1.56
0.7	2.07	0.425	0.530	2.29	1.04	0.640	3.85	2.44	1.75
0.8	1.99	0.390	0.500	2.29	0.910	0.663	4.08	2.32	1.96
0.9	1.91	0.385	0.481	2.33	0.812	0.720	4.28	2.21	2.20
1.0	1.85	0.279	0.468	2.60	0.774	0.915	4.48	2.11	2.46

Table 38 Concluded

 $\theta_b = 15^\circ, \gamma = 1.4$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$
$M_\infty = 6, x = 2$				$M_\infty = 6, x = 20$				$M_\infty = 4, x = 6$	
0	2.67	2.88	0.885	2.67	2.96	0.945	2.67	3.55	1.10
0.1	2.58	2.70	0.852	2.60	1.46	0.945	2.47	3.05	1.09
0.2	2.50	2.53	0.850	2.52	1.20	0.940	2.29	2.62	1.08
0.3	2.43	2.35	0.850	2.44	1.14	0.932	2.13	2.36	1.07
0.4	2.35	2.16	0.849	2.37	1.12	0.921	1.97	2.18	1.05
0.5	2.27	1.95	0.840	2.29	1.12	0.907	1.83	2.10	1.03
0.6	2.19	1.76	0.827	2.22	1.13	0.892	1.71	2.05	1.00
0.7	2.42	1.68	0.894	2.14	1.13	0.874	1.60	2.02	0.977
0.8	2.68	1.62	1.09	2.06	1.12	0.850	1.54	2.01	0.933
0.9	2.92	1.57	1.29	1.98	1.11	0.821	1.51	2.00	0.879
1.0	3.16	1.53	1.50	1.89	1.10	0.785	1.59	2.01	0.807
$M_\infty = 6, x = 3$				$M_\infty = 4, x = 1$				$M_\infty = 4, x = 10$	
0	2.67	2.80	0.773	2.67	3.67	1.23	2.67	3.61	1.17
0.1	2.56	2.57	0.770	2.50	3.55	1.22	2.49	2.98	1.16
0.2	2.44	2.35	0.769	2.43	3.44	1.22	2.32	2.56	1.15
0.3	2.35	2.12	0.768	2.59	3.42	1.34	2.18	2.25	1.14
0.4	2.27	1.89	0.769	2.95	3.41	1.53	2.06	2.07	1.11
0.5	2.20	1.69	0.773	3.26	3.38	1.74	1.94	2.02	1.08
0.6	2.14	1.51	0.778	3.50	3.32	1.93	1.79	1.99	1.05
0.7	2.09	1.39	0.786	3.71	3.24	2.14	1.63	1.98	1.00
0.8	2.15	1.33	0.838	3.90	3.18	2.35	1.49	1.96	0.959
0.9	2.32	1.30	0.955	4.07	3.14	2.55	1.39	1.94	0.922
1.0	2.53	1.31	1.11	4.21	3.09	2.77	1.29	1.92	0.986
$M_\infty = 6, x = 6$				$M_\infty = 4, x = 2$					
0	2.67	2.77	0.754	2.67	3.58	1.13			
0.1	2.52	2.37	0.754	2.52	3.42	1.12			
0.2	2.37	2.03	0.750	2.38	3.20	1.12			
0.3	2.24	1.72	0.744	2.26	2.99	1.11			
0.4	2.13	1.44	0.734	2.13	2.79	1.10			
0.5	2.02	1.27	0.722	2.07	2.63	1.10			
0.6	1.92	1.18	0.710	2.10	2.53	1.14			
0.7	1.85	1.12	0.706	2.26	2.50	1.28			
0.8	1.80	1.10	0.706	2.55	2.50	1.46			
0.9	1.76	1.08	0.710	2.80	2.52	1.67			
1.0	1.74	1.06	0.718	3.01	2.55	1.87			
$M_\infty = 6, x = 10$				$M_\infty = 4, x = 3$					
0	2.67	2.87	0.844	2.67	3.53	1.07			
0.1	2.55	2.20	0.844	2.48	3.32	1.07			
0.2	2.43	1.65	0.840	2.31	3.13	1.07			
0.3	2.32	1.34	0.831	2.18	2.87	1.06			
0.4	2.20	1.20	0.813	2.06	2.62	1.05			
0.5	2.08	1.13	0.791	1.94	2.40	1.04			
0.6	1.96	1.09	0.763	1.89	2.29	1.05			
0.7	1.85	1.06	0.732	1.93	2.24	1.09			
0.8	1.75	1.05	0.696	1.99	2.23	1.17			
0.9	1.65	1.03	0.668	2.15	2.25	1.29			
1.0	1.57	1.02	0.648	2.41	2.31	1.48			

Table 39

 $\theta_b = 15^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$
$H = 60, V_\infty = 10\ 000, x = 1$										
0	2.67	3.70	1.84	0.679	2.24	2.67	3.73	1.97	0.739	2.18
0.1	2.70	3.59	1.90	0.677	2.44	2.64	3.12	2.26	0.738	2.95
0.2	2.72	3.43	1.97	0.675	2.68	2.60	2.38	2.82	0.737	4.12
0.3	2.76	3.26	2.11	0.680	2.91	2.56	1.51	3.74	0.734	5.56
0.4	2.88	3.06	2.24	0.707	3.11	2.52	0.726	5.76	0.726	7.46
0.5	3.11	2.84	2.56	0.776	3.29	2.48	0.416	8.70	0.709	9.87
0.6	3.44	2.59	3.08	0.886	3.58	2.44	0.329	9.39	0.686	10.5
0.7	3.80	2.33	3.92	1.03	4.03	2.39	0.301	9.46	0.658	10.7
0.8	4.11	1.99	5.13	1.21	4.64	2.34	0.300	9.07	0.626	10.7
0.9	4.39	1.57	7.18	1.50	5.37	2.29	0.319	8.44	0.590	10.6
1.0	4.64	1.08	11.44	1.95	6.24	2.24	0.337	7.58	0.558	10.4
$H = 60, V_\infty = 10\ 000, x = 1.8$										
0	2.67	3.51	1.48	0.527	2.40	2.67	3.78	1.81	0.781	2.06
0.1	2.66	3.42	1.56	0.526	2.68	2.71	3.61	1.82	0.760	2.24
0.2	2.64	3.19	1.64	0.525	3.02	2.74	3.40	1.85	0.760	2.50
0.3	2.63	2.94	1.76	0.527	3.37	2.79	3.19	1.96	0.775	2.70
0.4	2.63	2.66	1.89	0.530	3.75	2.93	2.97	2.17	0.805	3.03
0.5	2.63	2.37	2.06	0.535	4.19	3.21	2.74	2.45	0.882	3.26
0.6	2.64	2.03	2.28	0.544	4.74	3.55	2.50	2.85	0.986	3.43
0.7	2.67	1.59	2.72	0.563	5.37	3.87	2.20	3.48	1.14	3.78
0.8	2.74	1.22	3.41	0.615	6.08	4.15	1.88	4.42	1.32	4.17
0.9	2.87	0.895	5.64	0.761	7.04	4.42	1.52	6.48	1.58	4.83
1.0	3.24	0.504	10.48	1.06	8.63	4.69	1.13	10.6	2.00	5.89
$H = 60, V_\infty = 10\ 000, x = 3.3$										
0	2.67	3.54	1.25	0.433	2.52	2.67	3.66	1.38	0.580	2.23
0.1	2.63	3.31	1.32	0.432	2.89	2.69	3.36	1.44	0.578	2.49
0.2	2.57	3.01	1.42	0.434	3.30	2.70	3.06	1.51	0.576	2.84
0.3	2.52	2.68	1.56	0.436	3.77	2.71	2.75	1.61	0.578	3.21
0.4	2.46	2.30	1.76	0.441	4.26	2.72	2.45	1.70	0.579	3.56
0.5	2.41	1.87	2.02	0.447	4.87	2.73	2.14	1.86	0.585	3.87
0.6	2.35	1.38	2.38	0.456	5.98	2.74	1.82	2.10	0.598	4.24
0.7	2.32	0.984	3.02	0.471	7.38	2.75	1.50	2.58	0.618	4.84
0.8	2.31	0.670	4.55	0.495	8.55	2.80	1.19	3.58	0.676	5.71
0.9	2.29	0.470	6.03	0.532	9.48	3.01	0.900	5.27	0.841	6.54
1.0	2.33	0.358	7.85	0.598	10.2	3.28	0.673	7.97	1.12	7.12
$H = 60, V_\infty = 10\ 000, x = 6.2$										
0	2.67	3.61	1.46	0.520	2.41	2.67	3.58	1.16	0.475	2.33
0.1	2.59	3.20	1.64	0.520	3.01	2.59	3.19	1.22	0.474	2.72
0.2	2.51	2.74	1.87	0.520	3.67	2.52	2.80	1.32	0.474	3.15
0.3	2.44	2.20	2.12	0.520	4.37	2.44	2.42	1.44	0.475	3.63
0.4	2.37	1.60	2.54	0.518	5.28	2.38	2.04	1.61	0.476	4.10
0.5	2.30	1.00	3.40	0.514	6.75	2.33	1.64	1.86	0.479	4.78
0.6	2.23	0.618	5.17	0.504	8.86	2.30	1.22	2.51	0.491	5.88
0.7	2.15	0.402	5.93	0.481	9.95	2.30	0.865	3.33	0.514	6.82
0.8	2.07	0.330	6.35	0.465	10.5	2.31	0.607	4.12	0.549	7.54
0.9	2.03	0.300	6.67	0.457	10.7	2.34	0.490	4.99	0.593	8.02
1.0	2.01	0.286	6.93	0.463	10.8	2.38	0.417	6.25	0.653	8.35

Table 39 Continued

 $\theta_b = 15^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$p$	$p \cdot 10$	$\beta$
$H = 60, V_\infty = 7500, x = 6.2$										
0	2.67	3.62	1.28	0.531	2.27	2.67	3.34	1.07	0.485	2.34
0.1	2.60	3.09	1.32	0.531	2.83	2.59	3.03	1.12	0.484	2.63
0.2	2.52	2.52	1.57	0.531	3.53	2.53	2.69	1.18	0.483	2.99
0.3	2.45	1.90	1.97	0.530	4.34	2.46	2.36	1.29	0.484	3.41
0.4	2.37	1.32	2.54	0.528	5.53	2.40	2.01	1.49	0.485	3.86
0.5	2.30	0.855	3.34	0.524	6.81	2.35	1.63	1.79	0.489	4.51
0.6	2.22	0.537	4.07	0.514	7.72	2.33	1.24	2.25	0.499	5.27
0.7	2.15	0.420	4.67	0.498	8.35	2.33	0.930	2.92	0.521	6.17
0.8	2.07	0.351	5.13	0.481	8.81	2.34	0.670	3.76	0.553	6.94
0.9	2.01	0.325	5.46	0.470	9.14	2.37	0.510	4.82	0.602	7.61
1.0	1.98	0.316	5.73	0.473	9.34	2.41	0.415	6.30	0.668	8.22
$H = 60, V_\infty = 7500, x = 10$										
0	2.67	3.74	1.64	0.698	2.12	2.67	3.41	1.11	0.508	2.32
0.1	2.62	2.86	1.87	0.697	3.03	2.59	2.87	1.20	0.508	2.72
0.2	2.57	1.95	2.43	0.698	4.17	2.51	2.43	1.37	0.508	3.26
0.3	2.52	1.19	3.62	0.696	5.80	2.44	1.92	1.64	0.508	3.97
0.4	2.47	0.607	5.28	0.687	7.31	2.37	1.41	2.08	0.505	4.75
0.5	2.42	0.423	6.40	0.671	8.34	2.29	0.941	2.78	0.501	5.83
0.6	2.36	0.359	6.93	0.649	8.77	2.21	0.618	3.48	0.494	7.14
0.7	2.31	0.341	7.12	0.622	8.99	2.14	0.441	4.33	0.485	8.04
0.8	2.25	0.308	7.03	0.594	9.06	2.07	0.361	5.06	0.476	8.67
0.9	2.19	0.343	6.62	0.565	9.03	2.02	0.322	5.53	0.470	9.09
1.0	2.13	0.351	5.93	0.540	8.90	2.00	0.317	5.81	0.480	9.32
$H = 30, V_\infty = 7500, x = 1$										
0	2.67	3.51	1.69	0.824	2.04	2.67	3.52	1.39	0.656	2.18
0.1	2.63	3.44	1.69	0.809	2.21	2.61	2.78	1.59	0.656	2.89
0.2	2.72	3.26	1.70	0.806	2.42	2.55	2.11	2.04	0.655	3.88
0.3	2.78	3.07	1.85	0.809	2.65	2.49	1.32	2.79	0.653	5.16
0.4	2.93	2.86	1.98	0.841	2.85	2.43	0.750	4.08	0.646	6.75
0.5	3.29	2.66	2.29	0.904	3.03	2.36	0.472	5.55	0.632	7.93
0.6	3.63	2.45	2.74	1.05	3.23	2.31	0.380	6.31	0.615	8.58
0.7	3.93	2.21	3.31	1.18	3.49	2.25	0.333	6.68	0.588	9.03
0.8	4.22	1.91	4.22	1.37	3.89	2.18	0.322	6.69	0.565	9.23
0.9	4.48	1.57	6.14	1.66	5.51	2.13	0.322	6.39	0.536	9.19
1.0	4.72	1.17	9.54	2.06	5.38	2.07	0.341	5.83	0.511	9.05
$H = 30, V_\infty = 7500, x = 1.8$										
0	2.67	3.47	1.29	0.591	2.22	2.67	3.47	1.51	0.830	2.00
0.1	2.68	3.21	1.32	0.591	2.43	2.73	3.31	1.55	0.824	2.15
0.2	2.69	2.95	1.39	0.594	2.71	2.77	3.13	1.60	0.823	2.31
0.3	2.72	2.68	1.47	0.598	2.98	2.83	2.94	1.67	0.823	2.48
0.4	2.74	2.42	1.57	0.601	3.29	2.98	2.76	1.87	0.860	2.66
0.5	2.75	2.15	1.76	0.606	3.66	3.30	2.61	2.17	0.945	2.85
0.6	2.76	1.85	2.07	0.619	4.06	3.62	2.44	2.59	1.07	3.04
0.7	2.76	1.54	2.53	0.639	4.59	3.93	2.20	3.28	1.23	3.35
0.8	2.81	1.21	3.32	0.695	5.21	4.21	1.89	4.35	1.43	3.88
0.9	3.02	0.96	4.57	0.829	5.96	4.48	1.57	5.89	1.74	4.39
1.0	3.36	0.71	7.52	1.18	6.80	4.76	1.25	8.13	2.13	4.76
$H = 30, V_\infty = 6000, x = 1$										
0	2.67	3.47	1.29	0.591	2.22	2.67	3.47	1.51	0.830	2.00
0.1	2.68	3.21	1.32	0.591	2.43	2.73	3.31	1.55	0.824	2.15
0.2	2.69	2.95	1.39	0.594	2.71	2.77	3.13	1.60	0.823	2.31
0.3	2.72	2.68	1.47	0.598	2.98	2.83	2.94	1.67	0.823	2.48
0.4	2.74	2.42	1.57	0.601	3.29	2.98	2.76	1.87	0.860	2.66
0.5	2.75	2.15	1.76	0.606	3.66	3.30	2.61	2.17	0.945	2.85
0.6	2.76	1.85	2.07	0.619	4.06	3.62	2.44	2.59	1.07	3.04
0.7	2.76	1.54	2.53	0.639	4.59	3.93	2.20	3.28	1.23	3.35
0.8	2.81	1.21	3.32	0.695	5.21	4.21	1.89	4.35	1.43	3.88
0.9	3.02	0.96	4.57	0.829	5.96	4.48	1.57	5.89	1.74	4.39
1.0	3.36	0.71	7.52	1.18	6.80	4.76	1.25	8.13	2.13	4.76

Table 39 Continued

 $\theta_b = 15^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 30, V_\infty = 6000, x = 1.8$						$H = 30, V_\infty = 5000, x = 1$					
0	2.67	3.30	1.16	0.613	2.18	2.67	3.52	1.54	0.835	2.16	
0.1	2.64	3.07	1.22	0.611	2.39	2.67	3.28	1.54	0.835	2.13	
0.2	2.62	2.84	1.31	0.612	2.62	2.68	3.05	1.61	0.832	2.34	
0.3	2.62	2.59	1.43	0.616	2.89	2.68	2.86	1.69	0.833	2.59	
0.4	2.62	2.33	1.59	0.625	3.19	2.83	2.70	1.88	0.887	2.78	
0.5	2.62	2.06	1.81	0.639	3.62	3.19	2.53	2.25	1.00	2.94	
0.6	2.64	1.74	2.10	0.659	4.20	3.55	2.34	2.74	1.15	3.11	
0.7	2.70	1.41	2.52	0.696	4.67	3.88	2.12	3.31	1.31	3.36	
0.8	2.84	1.15	3.13	0.776	5.09	4.19	1.87	4.00	1.51	3.69	
0.9	3.09	0.93	4.40	0.960	5.54	4.47	1.60	5.08	1.77	4.02	
1.0	3.39	0.77	6.64	1.24	6.02	4.76	1.33	7.08	2.19	4.38	
$H = 30, V_\infty = 6000, x = 3.3$						$H = 30, V_\infty = 5000, x = 1.8$					
0	2.67	3.22	1.00	0.518	2.35	2.67	3.24	1.25	0.678	2.18	
0.1	2.61	2.87	1.11	0.517	2.65	2.64	3.02	1.34	0.676	2.40	
0.2	2.54	2.54	1.24	0.516	3.04	2.61	2.79	1.44	0.674	2.65	
0.3	2.48	2.21	1.40	0.516	3.50	2.59	2.54	1.54	0.674	2.94	
0.4	2.42	1.86	1.60	0.516	4.02	2.57	2.27	1.65	0.675	3.26	
0.5	2.37	1.50	1.86	0.517	4.62	2.57	1.97	1.78	0.680	3.51	
0.6	2.33	1.10	2.20	0.520	5.21	2.58	1.64	2.00	0.687	4.02	
0.7	2.31	0.830	2.65	0.531	5.80	2.67	1.35	2.31	0.719	4.42	
0.8	2.32	0.675	3.34	0.562	6.34	2.84	1.11	2.90	0.804	4.79	
0.9	2.35	0.560	4.28	0.612	6.96	3.09	0.942	3.98	0.944	5.14	
1.0	2.41	0.460	5.74	0.688	7.62	3.42	0.825	6.10	1.28	5.53	
$H = 30, V_\infty = 6000, x = 6.2$						$H = 30, V_\infty = 5000, x = 3.3$					
0	2.67	3.20	1.00	0.515	2.28	2.67	3.12	1.05	0.545	2.30	
0.1	2.59	2.74	1.12	0.515	2.70	2.52	2.81	1.13	0.545	2.67	
0.2	2.51	2.27	1.33	0.514	3.29	2.56	2.48	1.24	0.544	3.06	
0.3	2.42	1.78	1.63	0.512	4.08	2.51	2.14	1.36	0.545	3.47	
0.4	2.34	1.27	1.99	0.509	4.93	2.47	1.79	1.54	0.547	3.88	
0.5	2.26	0.865	2.50	0.506	5.77	2.43	1.43	1.76	0.551	4.35	
0.6	2.19	0.620	3.20	0.502	6.60	2.39	1.10	2.09	0.559	4.86	
0.7	2.13	0.470	3.91	0.498	7.35	2.36	0.859	2.57	0.570	5.29	
0.8	2.08	0.400	4.51	0.495	7.98	2.34	0.710	3.25	0.590	5.93	
0.9	2.04	0.365	4.98	0.497	8.41	2.34	0.595	4.15	0.633	6.50	
1.0	2.01	0.355	5.28	0.499	8.62	2.43	0.503	5.28	0.716	7.08	
$H = 30, V_\infty = 6000, x = 10$						$H = 30, V_\infty = 5000, x = 6.2$					
0	2.67	3.32	1.20	0.638	2.16	2.67	3.11	1.02	0.526	2.32	
0.1	2.61	2.65	1.49	0.638	2.90	2.58	2.61	1.13	0.526	2.84	
0.2	2.54	1.97	1.94	0.637	3.84	2.49	2.14	1.29	0.526	3.40	
0.3	2.47	1.23	2.58	0.636	5.04	2.40	1.68	1.50	0.524	3.99	
0.4	2.40	0.720	3.65	0.631	6.19	2.32	1.26	1.79	0.521	4.61	
0.5	2.34	0.510	4.66	0.619	7.17	2.24	0.869	2.22	0.517	5.40	
0.6	2.27	0.400	5.42	0.603	7.93	2.18	0.653	2.82	0.512	6.16	
0.7	2.21	0.365	5.80	0.581	8.40	2.12	0.545	3.55	0.509	6.87	
0.8	2.14	0.355	5.86	0.555	8.64	2.08	0.467	4.17	0.511	7.46	
0.9	2.08	0.350	5.68	0.529	8.69	2.05	0.400	4.61	0.519	7.84	
1.0	2.01	0.350	5.29	0.501	8.61	2.04	0.397	4.86	0.532	7.94	

Table 39 Continued

$\theta_b = 15^\circ$

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$
$H = 30, V_\infty = 5000, x = 10$										
0	2.67	3.20	1.18	0.628	2.22	2.67	3.05	0.913	0.534	2.28
0.1	2.60	2.63	1.39	0.628	2.88	2.57	2.64	0.990	0.534	2.60
0.2	2.52	1.78	1.70	0.628	3.74	2.47	2.18	1.15	0.533	3.04
0.3	2.45	1.13	2.30	0.626	4.76	2.38	1.63	1.32	0.532	3.63
0.4	2.38	0.737	3.24	0.620	5.86	2.29	1.19	1.69	0.528	4.34
0.5	2.31	0.521	4.23	0.610	6.96	2.21	0.917	2.14	0.525	5.04
0.6	2.24	0.452	4.90	0.595	7.64	2.15	0.726	2.67	0.522	5.73
0.7	2.17	0.413	5.16	0.576	7.95	2.10	0.584	3.21	0.522	6.42
0.8	2.11	0.390	5.15	0.553	8.07	2.06	0.512	3.66	0.527	6.85
0.9	2.04	0.379	5.01	0.528	8.11	2.04	0.480	4.02	0.543	7.06
1.0	1.96	0.378	4.77	0.499	8.12	2.05	0.469	4.32	0.569	7.15
$H = 30, V_\infty = 4000, x = 6.2$										
0	2.67	3.41	1.53	0.971	1.92	2.67	3.13	1.02	0.612	2.20
0.1	2.67	3.27	1.55	0.955	2.05	2.58	2.42	1.12	0.612	2.68
0.2	2.69	3.11	1.59	0.957	2.20	2.49	1.76	1.45	0.612	3.48
0.3	2.75	2.95	1.66	0.972	2.34	2.41	1.22	2.05	0.609	4.64
0.4	2.93	2.76	1.84	1.04	2.51	2.33	0.789	2.81	0.604	5.58
0.5	3.36	2.57	2.14	1.15	2.66	2.25	0.600	3.53	0.593	6.31
0.6	3.70	2.37	2.52	1.30	2.84	2.17	0.510	4.08	0.579	6.85
0.7	4.01	2.14	3.03	1.48	3.05	2.10	0.468	4.23	0.561	7.14
0.8	4.31	1.90	3.75	1.70	3.31	2.03	0.445	4.25	0.541	7.30
0.9	4.57	1.67	4.81	1.96	3.57	1.96	0.432	4.21	0.518	7.42
1.0	4.81	1.45	6.30	2.29	3.86	1.88	0.427	4.12	0.497	7.49
$H = 30, V_\infty = 4000, x = 10$										
0	2.67	3.41	1.53	0.971	1.92	2.67	3.13	1.02	0.612	2.20
0.1	2.67	3.27	1.55	0.955	2.05	2.58	2.42	1.12	0.612	2.68
0.2	2.69	3.11	1.59	0.957	2.20	2.49	1.76	1.45	0.612	3.48
0.3	2.75	2.95	1.66	0.972	2.34	2.41	1.22	2.05	0.609	4.64
0.4	2.93	2.76	1.84	1.04	2.51	2.33	0.789	2.81	0.604	5.58
0.5	3.36	2.57	2.14	1.15	2.66	2.25	0.600	3.53	0.593	6.31
0.6	3.70	2.37	2.52	1.30	2.84	2.17	0.510	4.08	0.579	6.85
0.7	4.01	2.14	3.03	1.48	3.05	2.10	0.468	4.23	0.561	7.14
0.8	4.31	1.90	3.75	1.70	3.31	2.03	0.445	4.25	0.541	7.30
0.9	4.57	1.67	4.81	1.96	3.57	1.96	0.432	4.21	0.518	7.42
1.0	4.81	1.45	6.30	2.29	3.86	1.88	0.427	4.12	0.497	7.49
$H = 30, V_\infty = 4000, x = 1.8$										
0	2.67	3.25	1.23	0.752	2.08	2.67	3.27	1.25	0.769	2.07
0.1	2.66	3.06	1.26	0.750	2.25	2.64	2.07	2.03	0.769	3.56
0.2	2.66	2.81	1.32	0.747	2.47	2.61	1.01	3.90	0.767	5.66
0.3	2.66	2.53	1.40	0.747	2.73	2.57	0.519	5.64	0.764	6.91
0.4	2.67	2.22	1.52	0.748	3.00	2.54	0.475	6.61	0.758	7.08
0.5	2.68	1.92	1.66	0.751	3.29	2.50	0.481	5.85	0.751	7.02
0.6	2.69	1.65	1.89	0.762	3.60	2.46	0.509	5.20	0.741	6.89
0.7	2.74	1.42	2.22	0.790	3.92	2.42	0.521	4.97	0.728	6.80
0.8	2.87	1.23	2.83	0.898	4.26	2.38	0.530	4.80	0.714	6.74
0.9	3.26	1.07	3.89	1.10	4.62	2.33	0.530	4.68	0.698	6.72
1.0	3.49	0.932	5.56	1.37	5.00	2.28	0.532	4.57	0.677	6.71
$H = 30, V_\infty = 4000, x = 20$										
0	2.67	3.25	1.23	0.752	2.08	2.67	3.27	1.25	0.769	2.07
0.1	2.66	3.06	1.26	0.750	2.25	2.64	2.07	2.03	0.769	3.56
0.2	2.66	2.81	1.32	0.747	2.47	2.61	1.01	3.90	0.767	5.66
0.3	2.66	2.53	1.40	0.747	2.73	2.57	0.519	5.64	0.764	6.91
0.4	2.67	2.22	1.52	0.748	3.00	2.54	0.475	6.61	0.758	7.08
0.5	2.68	1.92	1.66	0.751	3.29	2.50	0.481	5.85	0.751	7.02
0.6	2.69	1.65	1.89	0.762	3.60	2.46	0.509	5.20	0.741	6.89
0.7	2.74	1.42	2.22	0.790	3.92	2.42	0.521	4.97	0.728	6.80
0.8	2.87	1.23	2.83	0.898	4.26	2.38	0.530	4.80	0.714	6.74
0.9	3.26	1.07	3.89	1.10	4.62	2.33	0.530	4.68	0.698	6.72
1.0	3.49	0.932	5.56	1.37	5.00	2.28	0.532	4.57	0.677	6.71
$H = 30, V_\infty = 4000, x = 3.3$										
0	2.67	3.09	0.975	0.576	2.24	2.67	3.19	1.30	1.00	1.86
0.1	2.60	2.82	1.00	0.574	2.47	2.68	3.04	1.34	0.995	1.97
0.2	2.55	2.50	1.08	0.574	2.74	2.69	2.85	1.40	0.995	2.11
0.3	2.50	2.11	1.19	0.576	3.08	2.75	2.70	1.51	1.02	2.25
0.4	2.47	1.73	1.36	0.579	3.48	3.03	2.58	1.69	1.11	2.35
0.5	2.44	1.42	1.63	0.586	3.94	3.42	2.49	1.96	1.24	2.43
0.6	2.41	1.14	2.03	0.603	4.44	3.76	2.36	2.32	1.40	2.56
0.7	2.40	0.900	2.54	0.624	5.04	4.04	2.19	2.81	1.58	2.75
0.8	2.39	0.757	3.08	0.648	5.56	4.31	1.97	3.50	1.79	2.98
0.9	2.41	0.670	3.80	0.690	6.00	4.55	1.78	4.39	2.05	3.21
1.0	2.49	0.593	4.78	0.784	6.35	4.78	1.61	5.52	2.37	3.45
$H = 30, V_\infty = 3000, x = 1$										

Table 39 Continued

 $\theta_b = 15^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 30, V_\infty = 3000, x = 1.8$						$H = 10, V_\infty = 5000, x = 1$					
0	2.67	3.00	1.06	0.780	2.00	2.67	3.27	1.46	0.869	2.00	
0.1	2.64	2.82	1.14	0.776	2.18	2.67	3.14	1.48	0.867	2.14	
0.2	2.62	2.63	1.22	0.775	2.38	2.66	2.97	1.57	0.871	2.34	
0.3	2.61	2.41	1.32	0.774	2.62	2.73	2.80	1.69	0.895	2.51	
0.4	2.60	2.18	1.43	0.777	2.87	2.95	2.64	1.85	0.944	2.67	
0.5	2.60	1.94	1.56	0.782	3.13	3.28	2.50	2.16	1.05	2.82	
0.6	2.61	1.71	1.80	0.795	3.41	3.63	2.32	2.58	1.19	2.99	
0.7	2.72	1.52	2.14	0.854	3.65	3.95	2.09	3.12	1.37	3.24	
0.8	2.94	1.35	2.69	0.980	3.89	4.25	1.85	3.91	1.58	3.56	
0.9	3.20	1.21	3.54	1.18	4.16	4.53	1.59	5.04	1.83	3.89	
1.0	3.50	1.09	4.85	1.46	4.43	4.78	1.34	6.96	2.21	4.26	
$H = 30, V_\infty = 3000, x = 3.3$						$H = 10, V_\infty = 5000, x = 1.8$					
0	2.67	2.83	0.87	0.612	2.15	2.67	3.14	1.21	0.691	2.15	
0.1	2.59	2.54	0.93	0.610	2.39	2.65	2.91	1.28	0.691	2.37	
0.2	2.52	2.25	1.04	0.610	2.66	2.64	2.67	1.35	0.690	2.63	
0.3	2.45	1.97	1.19	0.611	2.98	2.63	2.43	1.44	0.688	2.89	
0.4	2.40	1.71	1.35	0.613	3.30	2.63	2.18	1.56	0.689	3.18	
0.5	2.36	1.45	1.59	0.620	3.72	2.62	1.95	1.70	0.592	3.47	
0.6	2.33	1.23	1.87	0.631	4.12	2.62	1.70	1.92	0.598	3.82	
0.7	2.32	1.05	2.24	0.650	4.59	2.71	1.45	2.28	0.736	4.17	
0.8	2.31	0.90	2.69	0.678	4.97	2.90	1.21	2.85	0.828	4.53	
0.9	2.35	0.80	3.23	0.722	5.25	3.17	0.992	3.98	1.01	4.98	
1.0	2.47	0.75	3.98	0.838	5.51	3.45	0.834	6.13	1.30	5.50	
$H = 30, V_\infty = 3000, x = 6.2$						$H = 10, V_\infty = 5000, x = 3.3$					
0	2.67	2.78	0.820	0.574	2.18	2.67	3.01	0.994	0.543	2.31	
0.1	2.55	2.36	0.935	0.573	2.56	2.61	2.69	1.05	0.541	2.62	
0.2	2.44	1.94	1.15	0.572	3.01	2.56	2.39	1.14	0.541	2.95	
0.3	2.34	1.54	1.40	0.570	3.55	2.51	2.08	1.27	0.542	3.31	
0.4	2.25	1.21	1.71	0.567	4.15	2.47	1.77	1.43	0.543	3.67	
0.5	2.16	0.970	2.11	0.563	4.77	2.43	1.45	1.70	0.548	4.14	
0.6	2.08	0.810	2.48	0.558	5.27	2.40	1.11	2.05	0.559	4.70	
0.7	2.02	0.705	2.82	0.557	5.67	2.38	0.896	2.52	0.576	5.27	
0.8	1.98	0.640	3.12	0.562	5.96	2.37	0.710	3.18	0.539	5.84	
0.9	1.97	0.610	3.37	0.575	6.16	2.37	0.580	3.98	0.634	6.40	
1.0	1.98	0.595	3.56	0.601	6.24	2.46	0.508	5.33	0.732	7.04	
$H = 30, V_\infty = 3000, x = 10$						$H = 10, V_\infty = 5000, x = 6.2$					
0	2.67	2.87	0.91	0.654	2.11	2.67	2.98	0.954	0.516	2.34	
0.1	2.57	2.20	1.16	0.655	2.68	2.57	2.59	1.04	0.516	2.82	
0.2	2.48	1.63	1.53	0.653	3.43	2.47	2.14	1.20	0.516	3.31	
0.3	2.38	1.14	2.04	0.649	4.41	2.39	1.64	1.44	0.514	3.85	
0.4	2.29	0.835	2.73	0.641	5.18	2.30	1.24	1.78	0.512	4.47	
0.5	2.20	0.695	3.18	0.627	5.72	2.24	0.905	2.26	0.508	5.32	
0.6	2.11	0.620	3.44	0.603	6.06	2.17	0.660	2.83	0.504	6.20	
0.7	2.02	0.585	3.48	0.582	6.28	2.12	0.520	3.45	0.502	6.92	
0.8	1.93	0.567	3.42	0.554	6.40	2.07	0.440	4.12	0.503	7.50	
0.9	1.85	0.555	3.37	0.536	6.47	2.05	0.400	4.62	0.515	7.80	
1.0	1.80	0.550	3.36	0.523	6.52	2.05	0.395	4.90	0.534	7.95	

Table 39 Continued

$\theta_b \cdot 15^\circ$	$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$
$H = 10, V_\infty = 5000, x = 10$											
0	2.67	3.07	1.09	0.611	2.23	2.67	2.75	0.885	0.607	2.17	
0.1	2.59	2.40	1.32	0.612	2.87	2.59	2.49	0.960	0.606	2.42	
0.2	2.52	1.76	1.61	0.611	3.59	2.51	2.23	1.06	0.605	2.67	
0.3	2.43	1.10	1.94	0.608	4.62	2.45	1.96	1.19	0.606	2.98	
0.4	2.36	0.742	2.52	0.603	5.69	2.40	1.70	1.37	0.609	3.35	
0.5	2.29	0.549	4.15	0.593	6.85	2.36	1.44	1.60	0.615	3.75	
0.6	2.21	0.437	4.83	0.579	7.61	2.33	1.18	1.92	0.627	4.19	
0.7	2.15	0.398	5.04	0.560	7.86	2.31	1.00	2.32	0.646	4.66	
0.8	2.08	0.380	5.09	0.539	8.06	2.31	0.868	2.79	0.670	5.09	
0.9	2.00	0.368	4.97	0.513	8.18	2.32	0.785	3.35	0.711	5.42	
1.0	1.94	0.369	4.77	0.489	8.22	2.49	0.733	4.10	0.852	5.55	
$H = 10, V_\infty = 5000, x = 20$											
0	2.67	3.18	1.29	0.743	2.10	2.67	2.71	0.842	0.570	2.21	
0.1	2.65	1.83	2.21	0.743	3.77	2.56	2.30	0.940	0.570	2.55	
0.2	2.62	0.790	4.35	0.742	6.06	2.45	1.91	1.14	0.569	3.00	
0.3	2.59	0.428	6.22	0.739	7.58	2.34	1.55	1.40	0.568	3.54	
0.4	2.56	0.390	6.62	0.736	7.87	2.24	1.20	1.73	0.565	4.17	
0.5	2.53	0.400	6.39	0.731	7.64	2.15	0.963	2.12	0.560	4.82	
0.6	2.50	0.420	5.90	0.725	7.40	2.08	0.787	2.51	0.555	5.37	
0.7	2.47	0.443	5.61	0.717	7.31	2.03	0.680	2.88	0.553	5.60	
0.8	2.44	0.470	5.44	0.708	7.26	1.98	0.629	3.17	0.557	6.10	
0.9	2.40	0.488	5.30	0.697	7.23	1.97	0.599	3.42	0.569	6.28	
1.0	2.36	0.481	5.24	0.683	7.23	1.97	0.584	3.58	0.596	6.29	
$H = 10, V_\infty = 3000, x = 1$											
0	2.67	3.10	1.29	0.975	1.88	2.67	2.80	0.936	0.652	2.13	
0.1	2.66	2.96	1.32	0.967	1.99	2.57	2.20	1.17	0.652	2.70	
0.2	2.65	2.83	1.39	0.967	2.12	2.47	1.64	1.55	0.651	3.47	
0.3	2.70	2.70	1.48	0.986	2.25	2.38	1.13	2.09	0.647	4.33	
0.4	3.00	2.56	1.57	1.08	2.35	2.29	0.844	2.76	0.638	5.18	
0.5	3.40	2.43	1.96	1.23	2.46	2.20	0.678	3.23	0.625	5.77	
0.6	3.73	2.28	2.36	1.39	2.58	2.12	0.610	3.49	0.608	6.14	
0.7	4.01	2.14	2.83	1.57	2.73	2.03	0.575	3.55	0.584	6.32	
0.8	4.28	1.97	3.42	1.77	2.94	1.94	0.551	3.53	0.557	6.45	
0.9	4.53	1.79	4.37	2.03	3.21	1.86	0.540	3.47	0.536	6.52	
1.0	4.75	1.59	5.53	2.35	3.47	1.80	0.539	3.38	0.520	6.57	
$H = 10, V_\infty = 3000, x = 1.8$											
0	2.67	2.92	1.07	0.772	2.02	2.67	2.95	1.10	0.801	2.00	
0.1	2.64	2.73	1.13	0.768	2.19	2.63	1.64	2.14	0.801	3.59	
0.2	2.61	2.53	1.19	0.765	2.38	2.58	0.785	2.84	0.799	4.81	
0.3	2.60	2.33	1.28	0.765	2.59	2.54	0.605	3.29	0.794	5.66	
0.4	2.58	2.11	1.39	0.766	2.81	2.49	0.600	3.51	0.786	6.18	
0.5	2.57	1.89	1.56	0.769	3.07	2.45	0.610	3.50	0.778	6.20	
0.6	2.60	1.66	1.79	0.786	3.35	2.40	0.618	3.40	0.765	6.10	
0.7	2.70	1.45	2.12	0.836	3.66	2.35	0.628	3.25	0.751	6.00	
0.8	2.88	1.28	2.68	0.977	3.95	2.30	0.635	3.08	0.735	5.97	
0.9	3.14	1.15	3.60	1.17	4.22	2.24	0.637	2.93	0.714	6.00	
1.0	3.49	1.07	4.86	1.45	4.46	2.17	0.638	2.80	0.689	5.98	
$H = 10, V_\infty = 3000, x = 20$											
0	2.67	2.92	1.07	0.772	2.02	2.67	2.95	1.10	0.801	2.00	
0.1	2.64	2.73	1.13	0.768	2.19	2.63	1.64	2.14	0.801	3.59	
0.2	2.61	2.53	1.19	0.765	2.38	2.58	0.785	2.84	0.799	4.81	
0.3	2.60	2.33	1.28	0.765	2.59	2.54	0.605	3.29	0.794	5.66	
0.4	2.58	2.11	1.39	0.766	2.81	2.49	0.600	3.51	0.786	6.18	
0.5	2.57	1.89	1.56	0.769	3.07	2.45	0.610	3.50	0.778	6.20	
0.6	2.60	1.66	1.79	0.786	3.35	2.40	0.618	3.40	0.765	6.10	
0.7	2.70	1.45	2.12	0.836	3.66	2.35	0.628	3.25	0.751	6.00	
0.8	2.88	1.28	2.68	0.977	3.95	2.30	0.635	3.08	0.735	5.97	
0.9	3.14	1.15	3.60	1.17	4.22	2.24	0.637	2.93	0.714	6.00	
1.0	3.49	1.07	4.86	1.45	4.46	2.17	0.638	2.80	0.689	5.98	

Table 39 Concluded

$\theta_b = 15^\circ$

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$
$H = 30, V_\infty = 5000, \bar{R} = 0, x = 0.44$						$H = 30, V_\infty = 5000, \bar{R} = 0, x = 4.66$				
0	2.67	3.43	1.65	0.949	1.91	2.67	3.09	0.989	0.506	2.34
0.1	2.73	3.33	1.68	0.940	2.02	2.58	2.81	1.06	0.505	2.68
0.2	2.80	3.24	1.72	0.931	2.12	2.49	2.49	1.16	0.503	3.04
0.3	2.79	3.11	1.74	0.913	2.28	2.40	2.13	1.25	0.502	3.44
0.4	2.92	3.00	1.76	0.930	2.39	2.31	1.72	1.39	0.500	3.90
0.5	2.41	2.96	2.24	1.13	2.44	2.22	1.17	1.85	0.496	4.76
0.6	4.02	2.92	2.80	1.40	2.49	2.14	0.710	2.63	0.491	5.91
0.7	4.56	2.87	3.40	1.69	2.55	2.08	0.540	3.36	0.488	6.84
0.8	5.06	2.76	4.13	2.01	2.65	2.05	0.440	4.14	0.492	7.56
0.9	5.59	2.43	5.30	2.40	2.99	2.04	0.409	4.56	0.511	7.84
1.0	6.04	1.81	8.18	3.09	3.71	2.05	0.399	4.87	0.535	7.92
$H = 30, V_\infty = 5000, \bar{R} = 0, x = 1.09$						$H = 30, V_\infty = 5000, \bar{R} = 0, x = 7.75$				
0	2.67	3.27	1.32	0.721	2.14	2.67	3.17	1.13	0.595	2.25
0.1	2.59	3.13	1.38	0.720	2.36	2.59	2.71	1.27	0.596	2.76
0.2	2.52	2.97	1.43	0.718	2.50	2.51	2.21	1.43	0.595	3.29
0.3	2.48	2.80	1.49	0.712	2.66	2.42	1.62	1.74	0.594	4.03
0.4	2.47	2.61	1.56	0.708	2.88	2.34	0.86	2.71	0.590	5.32
0.5	2.50	2.40	1.65	0.716	3.09	2.27	0.54	4.08	0.581	7.03
0.6	2.58	2.18	1.78	0.732	3.24	2.20	0.43	4.83	0.567	7.65
0.7	2.70	1.89	1.96	0.753	3.64	2.12	0.408	4.97	0.548	7.66
0.8	2.89	1.46	2.41	0.812	4.23	2.05	0.382	5.01	0.525	8.02
0.9	3.16	1.08	3.75	1.00	4.83	1.98	0.371	4.94	0.501	8.27
1.0	3.55	0.871	6.19	1.36	5.37	1.91	0.364	4.70	0.475	8.27
$H = 30, V_\infty = 5000, \bar{R} = 0, x = 2.3$										
0	2.67	3.13	1.06	0.550	2.29					
0.1	2.62	2.94	1.11	0.548	2.52					
0.2	2.58	2.73	1.17	0.548	2.77					
0.3	2.54	2.50	1.24	0.550	3.03					
0.4	2.51	2.25	1.34	0.554	3.30					
0.5	2.47	1.99	1.46	0.560	3.61					
0.6	2.43	1.51	1.76	0.566	4.15					
0.7	2.37	1.01	2.26	0.569	4.98					
0.8	2.33	0.760	2.96	0.579	5.81					
0.9	2.33	0.602	3.96	0.621	6.54					
1.0	2.37	0.488	5.23	0.691	7.18					

Table 40

 $\theta_b = 20^\circ, \gamma = 1.4$ 

$x$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$
$M_\infty = \infty, x = 0.45$				$M_\infty = \infty, x = 4.7$				$M_\infty = 23, x = 2.6$	
0	6.56	3.47	2.57	3.64	2.59	0.930	3.64	2.56	0.863
0.1	6.50	3.38	2.65	3.54	2.34	0.931	3.52	2.42	0.861
0.2	6.47	3.30	2.74	3.44	2.08	0.931	3.42	2.20	0.860
0.3	6.44	3.21	2.83	3.33	1.80	0.930	3.32	1.98	0.859
0.4	6.43	3.11	2.92	3.23	1.38	0.925	3.23	1.75	0.860
0.5	6.44	3.00	3.01	3.12	1.13	0.914	3.15	1.53	0.861
0.6	6.46	2.88	3.12	3.01	0.830	0.898	3.08	1.30	0.866
0.7	6.48	2.75	3.23	2.92	0.680	0.677	3.01	1.10	0.875
0.8	6.52	2.59	3.36	2.83	0.520	0.452	2.95	0.928	0.869
0.9	6.57	2.37	3.54	2.75	0.490	0.830	2.90	0.751	0.910
1.0	6.61	2.18	3.73	2.69	0.476	0.817	2.85	0.592	0.936
$M_\infty = \infty, x = 1.75$				$M_\infty = \infty, x = 10$				$M_\infty = 23, x = 2.8$	
0	3.64	2.60	0.939	3.64	2.83	1.26	3.64	2.56	0.855
0.1	3.55	2.43	0.934	3.59	2.20	1.26	3.53	2.37	0.854
0.2	3.47	2.27	0.932	3.55	1.59	1.26	3.43	2.17	0.853
0.3	3.40	2.10	0.930	3.52	0.96	1.25	3.32	1.96	0.853
0.4	3.34	1.91	0.929	3.48	0.57	1.25	3.22	1.74	0.853
0.5	3.28	1.72	0.929	3.43	0.32	1.23	3.13	1.49	0.855
0.6	3.23	1.50	0.930	3.39	0.56	1.21	3.05	1.24	0.859
0.7	3.18	1.28	0.935	3.35	0.59	1.20	2.98	1.03	0.867
0.8	3.15	1.10	0.946	3.30	0.63	1.17	2.92	0.845	0.882
0.9	3.27	0.992	1.09	3.26	0.66	1.15	2.86	0.675	0.902
1.0	3.51	0.772	1.32	3.20	0.66	1.13	2.82	0.580	0.916
$M_\infty = \infty, x = 2.05$				$M_\infty = 23, x = 1.17$				$M_\infty = 23, x = 6.37$	
0	3.64	2.67	0.891	3.64	2.75	1.09	3.64	2.75	1.10
0.1	3.54	2.41	0.887	3.55	2.61	1.09	3.55	2.38	1.10
0.2	3.45	2.20	0.885	3.48	2.47	1.08	3.46	2.01	1.10
0.3	3.38	2.03	0.866	3.42	2.32	1.07	3.37	1.63	1.10
0.4	3.30	1.83	0.887	3.36	2.16	1.06	3.28	1.24	1.09
0.5	3.24	1.63	0.888	3.30	2.00	1.05	3.19	0.901	1.08
0.6	3.18	1.40	0.892	3.33	1.84	1.07	3.11	0.685	1.06
0.7	3.13	1.17	0.899	3.59	1.69	1.22	3.03	0.570	1.02
0.8	3.08	0.990	0.910	3.84	1.54	1.42	2.94	0.555	1.00
0.9	3.05	0.800	0.940	4.08	1.37	1.65	2.85	0.555	0.992
1.0	3.22	0.662	1.13	4.32	1.17	1.93	2.74	0.555	0.873
$M_\infty = \infty, x = 3.6$				$M_\infty = 23, x = 2.05$				$M_\infty = 23, x = 10$	
0	3.64	2.52	0.844	3.64	2.60	0.910	3.64	2.87	1.27
0.1	3.51	2.35	0.845	3.54	2.43	0.907	3.59	2.24	1.27
0.2	3.39	2.07	0.846	3.45	2.25	0.906	3.55	1.61	1.27
0.3	3.28	1.82	0.846	3.36	2.07	0.904	3.51	1.04	1.27
0.4	3.17	1.59	0.847	3.29	1.87	0.904	3.47	0.630	1.26
0.5	3.07	1.34	0.847	3.22	1.66	0.905	3.42	0.593	1.25
0.6	2.98	1.08	0.843	3.15	1.43	0.909	3.38	0.605	1.23
0.7	2.91	0.85	0.839	3.10	1.19	0.916	3.33	0.640	1.21
0.8	2.85	0.66	0.838	3.05	1.00	0.929	3.28	0.673	1.19
0.9	2.80	0.53	0.842	3.04	0.843	0.969	3.22	0.700	1.16
1.0	2.76	0.49	0.857	3.22	0.726	1.16	3.16	0.703	1.12

Table 40 Continued

 $\theta_b = 20^\circ, \gamma = 1.4$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	
$M_\infty = 15, x = 0.45$				$M_\infty = 15, x = 5$				$M_\infty = 10, x = 2$		
0	6.58	3.52	2.61	3.64	2.71	1.00	3.64	2.78	1.00	
0.1	6.47	3.45	2.69	3.53	2.40	1.00	3.52	2.60	1.00	
0.2	6.42	3.37	2.77	3.42	2.09	1.00	3.41	2.41	1.00	
0.3	6.39	3.28	2.87	3.31	1.77	1.00	3.32	2.21	1.00	
0.4	6.38	3.18	2.97	3.21	1.44	0.995	3.23	2.00	1.00	
0.5	6.39	3.07	3.07	3.10	1.11	0.981	3.15	1.77	1.00	
0.6	6.40	2.94	3.18	2.98	0.875	0.959	3.08	1.56	0.999	
0.7	6.42	2.82	3.29	2.88	0.702	0.930	3.01	1.36	0.998	
0.8	6.45	2.65	3.42	2.78	0.628	0.899	2.97	1.20	1.00	
0.9	6.48	2.46	3.57	2.70	0.620	0.870	3.01	1.07	1.02	
1.0	6.52	2.29	3.74	2.63	0.603	0.850	3.23	0.997	1.29	
$M_\infty = 15, x = 1$				$M_\infty = 15, x = 10$				$M_\infty = 10, x = 3$		
0	3.64	2.83	1.17	3.64	2.91	1.29	3.64	2.74	0.947	
0.1	3.55	2.71	1.16	3.58	2.22	1.29	3.50	2.51	0.946	
0.2	3.47	2.59	1.16	3.54	1.59	1.29	3.38	2.28	0.945	
0.3	3.39	2.47	1.14	3.49	1.03	1.29	3.26	2.04	0.944	
0.4	3.34	2.34	1.14	3.44	0.686	1.28	3.15	1.80	0.943	
0.5	3.40	2.21	1.20	3.40	0.670	1.26	3.04	1.53	0.941	
0.6	3.70	2.08	1.32	3.35	0.690	1.24	2.95	1.31	0.942	
0.7	3.97	1.93	1.48	3.30	0.715	1.22	2.87	1.11	0.944	
0.8	4.21	1.77	1.68	3.24	0.749	1.20	2.80	0.975	0.951	
0.9	4.44	1.60	1.91	3.18	0.755	1.16	2.74	0.870	0.961	
1.0	4.65	1.40	2.23	3.11	0.769	1.13	2.68	0.801	0.962	
$M_\infty = 15, x = 2$				$M_\infty = 10, x = 0.45$				$M_\infty = 10, x = 5$		
0	3.64	2.66	0.944	6.58	3.66	2.62	3.64	2.83	1.07	
0.1	3.53	2.49	0.941	6.47	3.60	2.72	3.52	2.50	1.07	
0.2	3.43	2.30	0.939	6.41	3.52	2.81	3.40	2.15	1.07	
0.3	3.35	2.12	0.938	6.37	3.43	2.90	3.28	1.79	1.06	
0.4	3.27	1.92	0.937	6.34	3.33	3.00	3.17	1.44	1.05	
0.5	3.20	1.72	0.938	6.34	3.21	3.10	3.05	1.16	1.03	
0.6	3.14	1.49	0.940	6.34	3.09	3.20	2.94	0.955	1.01	
0.7	3.06	1.27	0.941	6.36	2.95	3.31	2.83	0.825	0.983	
0.8	3.03	1.07	0.964	6.38	2.80	3.45	2.73	0.780	0.948	
0.9	3.06	0.922	1.02	6.41	2.62	3.60	2.64	0.765	0.919	
1.0	3.26	0.824	1.22	6.45	2.44	3.78	2.57	0.763	0.898	
$M_\infty = 15, x = 3$				$M_\infty = 10, x = 10$				$M_\infty = 10, x = 10$		
0	3.64	2.61	0.881	3.64	2.94	1.21	3.64	3.02	1.33	
0.1	3.51	2.41	0.880	3.53	2.81	1.21	3.58	2.25	1.33	
0.2	3.40	2.19	0.880	3.44	2.65	1.19	3.52	1.57	1.33	
0.3	3.29	1.96	0.880	3.40	2.53	1.17	3.46	1.03	1.32	
0.4	3.19	1.72	0.880	3.40	2.39	1.19	3.41	0.835	1.31	
0.5	3.09	1.47	0.880	3.45	2.27	1.26	3.35	0.840	1.30	
0.6	3.00	1.24	0.883	3.67	2.16	1.39	3.29	0.860	1.28	
0.7	2.92	1.03	0.889	3.98	2.03	1.57	3.23	0.882	1.25	
0.8	2.86	0.854	0.898	4.19	1.89	1.76	3.16	0.890	1.23	
0.9	2.80	0.721	0.913	4.40	1.74	1.99	3.09	0.905	1.19	
1.0	2.76	0.646	0.924	4.61	1.57	2.28	3.01	0.916	1.15	

Table 40 Concluded

$\theta_b = 20^\circ, \gamma = 1.4$

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$	$\eta \cdot 10$	$i \cdot 10$	$p \cdot 10$
$M_\infty = 6, x = 0.45$				$M_\infty = 6, x = 5$				$M_\infty = 4, x = 2$	
0	6.58	4.03	2.76	3.64	3.22	1.26	3.64	3.89	1.51
0.1	6.43	3.98	2.86	3.50	2.80	1.26	3.50	3.67	1.51
0.2	6.33	3.88	2.96	3.35	2.38	1.26	3.34	3.44	1.50
0.3	6.25	3.80	3.06	3.20	1.99	1.25	3.17	3.21	1.49
0.4	6.20	3.71	3.16	3.06	1.70	1.23	3.02	2.99	1.48
0.5	6.17	3.61	3.25	2.94	1.51	1.21	2.88	2.80	1.45
0.6	6.16	3.49	3.35	2.81	1.39	1.18	2.74	2.65	1.43
0.7	6.15	3.37	3.46	2.70	1.32	1.14	2.69	2.56	1.45
0.8	6.16	3.22	3.58	2.58	1.29	1.10	2.72	2.51	1.51
0.9	6.17	3.08	3.73	2.46	1.27	1.06	2.81	2.51	1.63
1.0	6.19	2.93	3.87	2.38	1.26	1.04	3.00	2.54	1.86
$M_\infty = 6, x = 1$				$M_\infty = 6, x = 10$				$M_\infty = 4, x = 3$	
0	3.64	3.23	1.35	3.64	3.36	1.47	3.64	3.89	1.51
0.1	3.51	3.14	1.34	3.54	2.44	1.47	3.42	3.59	1.51
0.2	3.38	3.00	1.33	3.46	1.75	1.46	3.18	3.21	1.50
0.3	3.26	2.86	1.32	3.38	1.44	1.45	3.02	2.97	1.49
0.4	3.25	2.73	1.34	3.29	1.37	1.44	2.84	2.72	1.47
0.5	3.37	2.62	1.43	3.21	1.36	1.42	2.72	2.55	1.45
0.6	3.63	2.51	1.59	3.12	1.39	1.40	2.59	2.45	1.42
0.7	3.88	2.40	1.78	3.03	1.40	1.37	2.45	2.37	1.39
0.8	4.09	2.30	1.98	2.95	1.40	1.33	2.33	2.31	1.37
0.9	4.29	2.20	2.21	2.85	1.41	1.29	2.25	2.28	1.35
1.0	4.47	2.10	2.46	2.75	1.38	1.25	2.40	2.30	1.47
$M_\infty = 6, x = 2$				$M_\infty = 4, x = 0.45$				$M_\infty = 4, x = 5$	
0	3.64	3.15	1.18	6.58	4.72	2.97	3.64	3.96	1.61
0.1	3.49	2.95	1.17	6.33	4.58	3.09	3.44	3.46	1.60
0.2	3.35	2.74	1.17	6.14	4.63	3.21	3.26	3.02	1.60
0.3	3.22	2.53	1.17	6.01	4.56	3.32	3.08	2.67	1.58
0.4	3.11	2.30	1.16	5.90	4.47	3.42	2.92	2.51	1.56
0.5	3.02	2.08	1.16	5.83	4.38	3.51	2.77	2.40	1.52
0.6	2.92	1.87	1.15	5.77	4.28	3.61	2.63	2.32	1.49
0.7	2.82	1.72	1.14	5.73	4.16	3.71	2.48	2.27	1.43
0.8	2.77	1.63	1.17	5.70	4.05	3.81	2.33	2.23	1.38
0.9	2.94	1.56	1.30	5.68	3.92	3.92	2.20	2.21	1.33
1.0	3.15	1.53	1.50	5.66	4.03	4.03	2.02	2.18	1.29
$M_\infty = 6, x = 3$				$M_\infty = 4, x = 1$				$M_\infty = 4, x = 10$	
0	3.64	3.13	1.14	3.64	3.96	1.61	3.64	4.06	1.76
0.1	3.46	2.86	1.14	3.43	3.83	1.59	3.49	2.85	1.76
0.2	3.32	2.62	1.14	3.25	3.69	1.57	3.36	2.50	1.75
0.3	3.17	2.34	1.14	3.07	3.55	1.56	3.23	2.41	1.73
0.4	3.04	2.04	1.13	3.10	3.44	1.61	3.11	2.37	1.71
0.5	2.92	1.81	1.12	3.30	3.35	1.78	3.00	2.35	1.68
0.6	2.81	1.63	1.11	3.58	3.29	2.02	2.88	2.35	1.65
0.7	2.71	1.50	1.11	3.75	3.23	2.19	2.75	2.35	1.61
0.8	2.63	1.41	1.10	3.91	3.18	2.35	2.63	2.33	1.57
0.9	2.56	1.34	1.10	4.07	3.13	2.56	2.50	2.31	1.52
1.0	2.52	1.30	1.11	4.21	3.10	2.78	2.36	2.29	1.45

Table 41

 $\theta_b = 20^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$
$H = 60, V_\infty = 10\ 000, x = 0.45$										
0	6.58	4.20	4.97	2.28	1.37	3.64	3.93	2.99	1.21	1.84
0.1	6.63	4.12	5.22	2.33	1.51	3.58	3.54	3.36	1.21	2.44
0.2	6.69	3.99	5.61	2.39	1.72	3.52	3.07	3.82	1.21	3.10
0.3	6.77	3.84	6.15	2.46	1.96	3.46	2.51	4.44	1.21	3.93
0.4	6.86	3.67	6.69	2.56	2.22	3.41	1.85	5.29	1.21	4.89
0.5	6.96	3.49	7.33	2.67	2.48	3.35	1.19	6.74	1.19	6.00
0.6	7.07	3.29	8.07	2.81	2.75	3.28	0.770	9.40	1.17	7.44
0.7	7.19	3.06	8.86	2.99	3.02	3.22	0.530	11.9	1.13	9.10
0.8	7.29	2.81	10.1	3.20	3.38	3.16	0.505	11.8	1.07	9.25
0.9	7.39	2.48	11.1	3.48	3.83	3.11	0.524	11.0	1.01	9.21
1.0	7.50	2.08	15.1	3.87	4.39	3.05	0.547	10.0	0.956	9.00
$H = 60, V_\infty = 10\ 000, x = 1.75$										
0	3.64	3.76	2.07	0.782	2.15	6.58	4.32	5.18	2.52	1.27
0.1	3.56	3.55	2.20	0.782	2.46	5.64	4.20	5.36	2.56	1.46
0.2	3.49	3.32	2.36	0.783	2.82	5.72	4.03	5.62	2.62	1.68
0.3	3.43	3.03	2.56	0.785	3.21	6.81	3.85	5.95	2.69	1.92
0.4	3.37	2.71	2.77	0.788	3.63	6.91	3.66	6.35	2.78	2.16
0.5	3.31	2.33	3.04	0.794	4.14	7.02	3.46	6.84	2.90	2.43
0.6	3.27	1.94	3.46	0.803	4.77	7.12	3.26	7.43	3.05	2.64
0.7	3.23	1.53	3.97	0.816	5.47	7.23	3.03	8.12	3.22	2.86
0.8	3.21	1.13	5.12	0.839	6.17	7.33	2.78	8.98	3.42	3.06
0.9	3.20	0.850	7.12	0.897	7.07	7.42	2.49	10.2	3.66	3.39
1.0	3.29	0.618	10.5	1.09	8.54	7.51	2.19	11.8	3.97	3.74
$H = 60, V_\infty = 10\ 000, x = 2.05$										
0	3.64	3.76	2.06	0.780	2.15	3.64	3.80	1.86	0.806	2.04
0.1	3.55	3.53	2.20	0.780	2.49	3.55	3.51	1.96	0.805	2.38
0.2	3.47	3.26	2.37	0.780	2.88	3.47	3.18	2.08	0.809	2.79
0.3	3.40	2.97	2.55	0.780	3.31	3.39	2.84	2.24	0.814	3.19
0.4	3.33	2.64	2.77	0.780	3.77	3.32	2.48	2.42	0.824	3.56
0.5	3.26	2.28	3.07	0.781	4.25	3.26	2.10	2.70	0.837	3.94
0.6	3.20	1.83	3.53	0.788	4.81	3.21	1.70	3.31	0.857	4.42
0.7	3.15	1.40	4.21	0.803	5.56	3.16	1.35	4.21	0.882	5.28
0.8	3.09	1.05	5.30	0.830	6.42	3.12	1.01	5.29	0.915	6.32
0.9	3.05	0.760	7.46	0.877	7.62	3.09	0.755	6.45	0.963	7.04
1.0	3.05	0.547	10.0	0.957	9.00	3.11	0.622	7.63	1.03	7.46
$H = 60, V_\infty = 10\ 000, x = 3.6$										
0	3.64	3.85	2.51	0.987	1.99	3.64	3.89	2.24	0.990	1.92
0.1	3.55	3.51	2.76	0.988	2.44	3.55	3.39	2.40	0.991	2.44
0.2	3.48	3.14	3.08	0.989	3.02	3.45	2.84	2.64	0.991	3.00
0.3	3.40	2.70	3.45	0.988	3.68	3.36	2.37	2.95	0.990	3.62
0.4	3.31	2.18	3.92	0.987	4.43	3.29	1.94	3.34	0.999	4.35
0.5	3.22	1.62	4.60	0.980	5.22	3.19	1.42	4.27	0.978	5.34
0.6	3.12	1.13	5.69	0.963	6.07	3.10	1.01	5.80	0.957	6.50
0.7	3.02	0.752	7.54	0.925	7.51	2.99	0.695	6.51	0.922	7.29
0.8	2.94	0.563	9.30	0.886	8.80	2.89	0.579	6.76	0.879	7.61
0.9	2.87	0.509	9.62	0.864	8.65	2.81	0.538	6.83	0.859	7.76
1.0	2.83	0.486	9.41	0.840	8.39	2.78	0.528	6.96	0.855	7.82

Table 41 Continued

$\theta_b = 20^\circ$

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$
$H = 60, V_\infty = 7500, x = 4.3$						$H = 30, V_\infty = 7500, x = 2.05$				
0	3.64	3.93	2.46	1.09	1.85	3.64	3.62	1.69	0.821	2.06
0.1	3.56	3.41	2.68	1.09	2.37	3.54	3.41	1.78	0.822	2.32
0.2	3.47	2.83	2.98	1.09	3.03	3.46	3.11	1.87	0.824	2.62
0.3	3.40	2.22	3.40	1.09	3.81	3.39	2.78	2.02	0.828	2.93
0.4	3.32	1.69	4.19	1.09	4.75	3.32	2.41	2.19	0.835	3.29
0.5	3.24	1.16	5.83	1.08	5.93	3.26	2.03	2.53	0.848	3.72
0.6	3.16	0.756	7.13	1.06	7.04	3.21	1.67	3.13	0.866	4.26
0.7	3.08	0.613	7.74	1.03	7.50	3.17	1.33	3.85	0.892	5.08
0.8	3.00	0.567	7.74	0.995	7.69	3.13	1.02	4.78	0.928	5.89
0.9	2.91	0.530	7.47	0.937	7.78	3.12	0.76	5.84	0.975	6.55
1.0	2.81	0.537	7.03	0.873	7.78	3.14	0.61	7.23	1.05	7.03
$H = 60, V_\infty = 7500, x = 6.37$						$H = 30, V_\infty = 7500, x = 3.6$				
0	3.64	4.01	2.84	1.29	1.75	3.64	3.68	1.93	0.948	1.86
0.1	3.60	3.21	3.14	1.29	2.59	3.53	3.25	2.06	0.949	2.31
0.2	3.56	2.36	3.97	1.28	3.62	3.44	2.84	2.24	0.949	2.81
0.3	3.54	1.57	5.44	1.28	4.86	3.35	2.41	2.49	0.947	3.32
0.4	3.51	0.910	7.72	1.28	6.46	3.26	1.94	2.97	0.942	3.92
0.5	3.48	0.619	9.49	1.27	7.50	3.15	1.42	3.85	0.930	4.76
0.6	3.45	0.593	9.55	1.25	7.58	3.05	1.02	4.72	0.911	5.93
0.7	3.41	0.590	9.38	1.22	7.59	2.96	0.72	5.53	0.887	6.73
0.8	3.36	0.620	9.00	1.19	7.53	2.87	0.59	6.15	0.861	7.17
0.9	3.30	0.645	8.50	1.15	7.44	2.80	0.54	6.48	0.846	7.39
1.0	3.24	0.661	7.89	1.10	7.33	2.78	0.52	6.72	0.858	7.51
$H = 30, V_\infty = 7500, x = 0.45$						$H = 30, V_\infty = 7500, x = 4.7$				
0	6.58	4.20	4.58	2.56	1.27	3.64	3.76	2.16	1.08	1.87
0.1	6.62	4.08	4.73	2.61	1.42	3.53	3.25	2.28	1.08	2.41
0.2	6.68	3.96	4.96	2.66	1.59	3.44	2.72	2.62	1.08	2.97
0.3	6.76	3.78	5.24	2.74	1.80	3.37	2.15	3.13	1.08	3.61
0.4	6.84	3.61	5.57	2.83	2.00	3.27	1.56	4.03	1.08	4.55
0.5	6.94	3.42	5.97	2.95	2.18	3.21	1.08	5.39	1.07	5.69
0.6	7.05	3.24	6.42	3.07	2.36	3.14	0.741	6.57	1.05	6.53
0.7	7.14	3.03	7.08	3.21	2.56	3.09	0.591	7.39	1.02	7.17
0.8	7.25	2.78	7.89	3.41	2.85	3.00	0.556	7.37	0.993	7.32
0.9	7.37	2.44	9.09	3.66	3.23	2.92	0.539	7.12	0.943	7.41
1.0	7.43	2.20	10.6	3.97	3.46	2.81	0.539	6.77	0.876	7.44
$H = 30, V_\infty = 7500, x = 1.75$						$H = 30, V_\infty = 6000, x = 0.45$				
0	3.64	3.62	1.73	0.847	2.03	0.658	4.15	4.08	2.61	1.22
0.1	3.58	3.39	1.81	0.847	2.31	0.661	4.03	4.24	2.66	1.36
0.2	3.53	3.12	1.92	0.848	2.59	0.667	3.90	4.43	2.72	1.52
0.3	3.48	2.76	2.06	0.852	2.89	0.674	3.74	4.66	2.80	1.69
0.4	3.43	2.43	2.19	0.861	3.24	0.683	3.57	4.96	2.89	1.85
0.5	3.38	2.10	2.45	0.871	3.59	0.692	3.37	5.32	2.99	2.03
0.6	3.34	1.81	2.87	0.889	3.99	0.701	3.17	5.75	3.11	2.20
0.7	3.30	1.50	3.57	0.915	4.59	0.710	2.98	6.28	3.25	2.35
0.8	3.26	1.15	4.55	0.954	5.41	0.718	2.77	7.11	3.42	2.60
0.9	3.28	0.898	5.73	1.01	6.37	0.727	2.52	8.35	3.64	2.89
1.0	3.40	0.721	7.59	1.21	7.72	0.735	2.22	10.0	3.94	3.31

Table 41 Continued

 $\theta_b = 20^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$p$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$p$	$p \cdot 10$	$\beta$	
$H = 30, V_\infty = 6000, x = 1.75$						$H = 30, V_\infty = 5000, x = 0.45$					
0	3.64	3.50	1.58	0.881	1.97	6.58	4.05	3.68	2.53	1.22	
0.1	3.52	3.26	1.65	0.880	2.17	6.60	3.94	3.84	2.59	1.33	
0.2	3.47	2.99	1.77	0.880	2.43	6.65	3.80	4.08	2.66	1.47	
0.3	3.39	2.70	1.94	0.881	2.74	6.69	3.67	4.36	2.74	1.64	
0.4	3.32	2.41	2.16	0.886	3.08	6.76	3.51	4.74	2.85	1.81	
0.5	3.28	2.10	2.47	0.896	3.51	6.83	3.36	5.17	2.96	1.98	
0.6	3.24	1.73	2.79	0.911	4.03	6.91	3.19	5.67	3.10	2.18	
0.7	3.22	1.40	3.38	0.938	4.51	7.00	3.01	6.20	3.25	2.37	
0.8	3.22	1.14	4.10	0.980	4.99	7.10	2.79	6.85	3.44	2.61	
0.9	3.26	0.925	5.22	1.05	5.46	7.19	2.55	7.76	3.65	2.86	
1.0	3.44	0.780	6.69	1.17	5.95	7.28	2.27	9.07	3.95	3.17	
$H = 30, V_\infty = 6000, x = 2.05$						$H = 30, V_\infty = 5000, x = 1.75$					
0	3.64	3.49	1.58	0.867	1.98	3.64	3.43	1.65	0.951	1.91	
0.1	3.53	3.23	1.61	0.867	2.21	3.55	3.19	1.76	0.950	2.20	
0.2	3.44	2.93	1.76	0.867	2.52	3.48	2.93	1.90	0.948	2.49	
0.3	3.35	2.63	1.98	0.868	2.87	3.40	2.64	2.06	0.948	2.81	
0.4	3.27	2.31	2.24	0.869	3.24	3.34	2.33	2.25	0.947	3.16	
0.5	3.19	1.96	2.58	0.870	3.73	3.28	2.01	2.46	0.948	3.54	
0.6	3.14	1.60	2.97	0.878	4.37	3.23	1.64	2.73	0.953	3.97	
0.7	3.10	1.26	3.50	0.899	4.96	3.21	1.32	3.09	0.961	4.40	
0.8	3.09	0.990	4.19	0.934	5.47	3.20	1.09	3.62	0.978	4.78	
0.9	3.09	0.815	5.04	0.985	5.90	3.22	0.971	4.40	1.01	5.13	
1.0	3.16	0.635	6.43	1.10	6.29	3.46	0.841	6.13	1.31	5.47	
$H = 30, V_\infty = 6000, x = 3.6$						$H = 30, V_\infty = 5000, x = 2.05$					
0	3.64	3.54	1.70	0.951	1.93	3.64	3.41	1.61	0.926	1.93	
0.1	3.53	3.14	1.85	0.951	2.27	3.54	3.14	1.73	0.925	2.25	
0.2	3.43	2.74	2.08	0.950	2.70	3.48	2.85	1.87	0.924	2.59	
0.3	3.33	2.28	2.44	0.947	3.29	3.38	2.53	2.04	0.923	2.96	
0.4	3.24	1.83	2.92	0.942	4.00	3.30	2.19	2.25	0.923	3.35	
0.5	3.14	1.36	3.50	0.934	4.78	3.23	1.84	2.51	0.923	3.76	
0.6	3.04	0.995	4.21	0.921	5.43	3.17	1.47	2.85	0.927	4.18	
0.7	2.95	0.770	4.89	0.904	6.01	3.11	1.17	3.34	0.938	4.65	
0.8	2.87	0.635	5.42	0.883	6.47	3.06	0.990	4.00	0.956	5.07	
0.9	2.80	0.590	5.81	0.869	6.78	3.06	0.850	4.85	0.993	5.47	
1.0	2.75	0.560	6.05	0.862	6.95	3.16	0.737	5.91	1.12	5.85	
$H = 30, V_\infty = 6000, x = 4.7$						$H = 30, V_\infty = 5000, x = 3.6$					
0	3.64	3.61	1.88	1.07	1.85	3.64	3.43	1.66	0.958	1.91	
0.1	3.55	3.14	2.06	1.07	2.30	3.52	3.03	1.86	0.959	2.35	
0.2	3.45	2.63	2.46	1.07	2.93	3.41	2.57	2.10	0.959	2.84	
0.3	3.36	2.05	3.04	1.07	3.68	3.30	2.09	2.38	0.957	3.34	
0.4	3.28	1.49	3.76	1.06	4.53	3.21	1.67	2.70	0.953	3.88	
0.5	3.19	1.04	4.59	1.05	5.32	3.11	1.31	3.12	0.946	4.42	
0.6	3.11	0.765	5.58	1.03	6.00	3.03	1.04	3.62	0.937	4.98	
0.7	3.04	0.635	6.31	1.00	6.58	2.95	0.820	4.38	0.926	5.53	
0.8	2.94	0.575	6.45	0.966	6.78	2.89	0.711	5.10	0.916	6.00	
0.9	2.86	0.560	6.36	0.926	6.86	2.83	0.645	5.54	0.909	6.34	
1.0	2.78	0.570	6.08	0.884	6.87	2.78	0.609	5.60	0.903	6.43	

Table 41 Continued

 $\theta_b = 20^\circ$ 

$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$
$H = 30, V_\infty = 5000, x = 4.7$									
0	3.64	3.49	1.81	1.06	1.84	3.64	3.40	1.49	0.945
0.1	3.55	3.07	2.06	1.06	2.39	3.51	3.02	1.54	0.945
0.2	3.46	2.58	2.37	1.06	2.96	3.38	2.55	1.69	0.945
0.3	3.36	1.93	2.83	1.06	3.62	3.27	2.13	1.92	0.945
0.4	3.26	1.37	3.42	1.05	4.30	3.17	1.73	2.26	0.942
0.5	3.16	0.950	4.15	1.04	5.01	3.08	1.39	2.68	0.937
0.6	3.06	0.770	5.04	1.02	5.68	3.00	1.12	3.19	0.931
0.7	2.97	0.669	5.66	0.993	6.40	2.92	0.924	3.79	0.925
0.8	2.89	0.620	5.80	0.954	6.46	2.86	0.768	4.45	0.925
0.9	2.82	0.600	5.74	0.919	6.46	2.81	0.700	4.83	0.933
1.0	2.76	0.605	5.59	0.896	6.46	2.79	0.687	5.04	0.947
$H = 30, V_\infty = 4000, x = 0.45$									
0	6.58	4.10	3.66	2.67	1.18	3.64	3.45	1.60	1.02
0.1	6.58	4.02	3.79	2.73	1.28	3.53	2.91	1.70	1.02
0.2	6.59	3.91	3.96	2.80	1.37	3.42	2.39	1.83	1.02
0.3	6.63	3.79	4.15	2.88	1.51	3.32	1.93	2.25	1.02
0.4	6.67	3.64	4.37	2.97	1.66	3.22	1.49	2.79	1.01
0.5	6.74	3.46	4.67	3.08	1.84	3.11	1.15	3.40	1.00
0.6	6.81	3.26	5.04	3.21	2.02	3.01	0.900	4.03	0.934
0.7	6.87	3.09	5.50	3.31	2.21	2.91	0.761	4.76	0.957
0.8	6.97	2.77	6.09	3.54	2.41	2.83	0.692	4.93	0.931
0.9	7.05	2.55	6.80	3.77	2.62	2.75	0.670	4.96	0.910
1.0	7.14	2.38	7.54	3.99	2.79	2.70	0.658	4.97	0.897
$H = 30, V_\infty = 4000, x = 1.75$									
0	3.64	3.44	1.60	1.02	1.89	3.64	3.60	1.97	1.29
0.1	3.56	3.25	1.65	1.01	2.08	3.59	2.55	2.54	1.29
0.2	3.50	2.98	1.74	1.01	2.32	3.55	1.54	3.63	1.29
0.3	3.44	2.64	1.85	1.01	2.61	3.50	0.880	5.01	1.29
0.4	3.38	2.29	1.99	1.01	2.92	3.46	0.710	6.21	1.28
0.5	3.34	1.97	2.19	1.01	3.22	3.41	0.700	6.52	1.27
0.6	3.29	1.68	2.49	1.02	3.54	3.37	0.741	6.22	1.25
0.7	3.26	1.45	2.87	1.04	3.88	3.31	0.770	5.58	1.23
0.8	3.24	1.25	3.34	1.05	4.23	3.27	0.789	5.74	1.21
0.9	3.34	1.00	4.22	1.17	4.60	3.21	0.800	5.52	1.19
1.0	3.54	0.951	5.59	1.41	4.94	3.15	0.808	5.33	1.16
$H = 30, V_\infty = 4000, x = 2.05$									
0	3.64	3.41	1.53	0.972	1.92	6.58	4.05	3.11	2.81
0.1	3.56	3.17	1.56	0.969	2.14	6.55	3.94	3.24	2.87
0.2	3.48	2.88	1.65	0.969	2.39	6.55	3.82	3.39	2.95
0.3	3.40	2.54	1.79	0.970	2.69	6.57	3.68	3.56	3.03
0.4	3.34	2.18	1.99	0.973	3.01	6.61	3.53	3.77	3.13
0.5	3.28	1.84	2.25	0.977	3.35	6.65	3.37	4.02	3.24
0.6	3.22	1.55	2.56	0.985	3.70	6.70	3.22	4.28	3.36
0.7	3.17	1.33	2.94	1.00	4.07	6.76	3.06	4.61	3.49
0.8	3.14	1.13	3.48	1.02	4.46	6.81	2.90	5.04	3.63
0.9	3.17	0.980	4.18	1.06	4.86	6.86	2.72	5.61	3.80
1.0	3.25	0.844	5.40	1.22	5.28	6.92	2.54	6.28	4.01
$H = 30, V_\infty = 3000, x = 0.45$									
0	3.64	3.41	1.53	0.972	1.92	6.58	4.05	3.11	2.81
0.1	3.56	3.17	1.56	0.969	2.14	6.55	3.94	3.24	2.87
0.2	3.48	2.88	1.65	0.969	2.39	6.55	3.82	3.39	2.95
0.3	3.40	2.54	1.79	0.970	2.69	6.57	3.68	3.56	3.03
0.4	3.34	2.18	1.99	0.973	3.01	6.61	3.53	3.77	3.13
0.5	3.28	1.84	2.25	0.977	3.35	6.65	3.37	4.02	3.24
0.6	3.22	1.55	2.56	0.985	3.70	6.70	3.22	4.28	3.36
0.7	3.17	1.33	2.94	1.00	4.07	6.76	3.06	4.61	3.49
0.8	3.14	1.13	3.48	1.02	4.46	6.81	2.90	5.04	3.63
0.9	3.17	0.980	4.18	1.06	4.86	6.86	2.72	5.61	3.80
1.0	3.25	0.844	5.40	1.22	5.28	6.92	2.54	6.28	4.01

**Table 41 Continued**

$\theta_b = 20^\circ$

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 30, V_\infty = 3000, x = 1.75$						$H = 10, V_\infty = 5000, x = 0.45$					
0	3.64	3.23	1.37	1.05	1.83	6.58	3.99	3.55	2.57	1.21	
0.1	3.55	2.99	1.46	1.05	2.02	6.59	3.87	3.71	2.62	1.33	
0.2	3.47	2.75	1.56	1.05	2.24	6.62	3.76	3.93	2.69	1.47	
0.3	3.39	2.50	1.68	1.05	2.45	6.67	3.61	4.20	2.77	1.61	
0.4	3.33	2.25	1.85	1.05	2.68	6.73	3.46	4.51	2.89	1.76	
0.5	3.27	1.99	2.04	1.05	2.94	6.80	3.30	4.87	3.00	1.91	
0.6	3.22	1.74	2.29	1.06	3.28	6.87	3.14	5.28	3.13	2.07	
0.7	3.18	1.51	2.60	1.07	3.59	6.95	2.96	5.82	3.27	2.24	
0.8	3.16	1.34	3.06	1.11	3.88	7.03	2.76	6.44	3.44	2.45	
0.9	3.32	1.20	3.78	1.24	4.15	7.11	2.54	7.24	3.65	2.70	
1.0	3.54	1.11	4.83	1.49	4.39	7.20	2.28	8.39	3.95	3.05	
$H = 30, V_\infty = 3000, x = 2.05$						$H = 10, V_\infty = 5000, x = 1.75$					
0	3.64	3.20	1.32	1.01	1.85	3.64	3.33	1.59	0.959	1.94	
0.1	3.44	2.67	1.52	1.00	2.25	3.56	3.08	1.67	0.956	2.18	
0.2	3.37	2.45	1.62	1.00	2.44	3.49	2.81	1.79	0.955	2.46	
0.3	3.31	2.26	1.74	1.00	2.63	3.43	2.54	1.94	0.955	2.73	
0.4	3.26	2.10	1.86	1.01	2.82	3.37	2.25	2.10	0.957	3.07	
0.5	3.21	1.88	2.07	1.01	3.09	3.32	1.95	2.33	0.960	3.42	
0.6	3.16	1.67	2.32	1.02	3.39	3.27	1.64	2.63	0.965	3.81	
0.7	3.12	1.48	2.59	1.03	3.67	3.22	1.38	3.00	0.974	4.12	
0.8	3.09	1.33	2.91	1.04	3.94	3.21	1.16	3.56	0.997	4.58	
0.9	3.07	1.22	3.19	1.06	4.15	3.25	0.970	4.51	1.09	5.01	
1.0	3.05	1.11	3.59	1.09	4.41	3.49	0.849	6.17	1.33	5.44	
$H = 30, V_\infty = 3000, x = 3.6$						$H = 10, V_\infty = 5000, x = 2.05$					
0	3.64	3.17	1.29	0.979	1.87	3.64	3.31	1.54	0.924	1.95	
0.1	3.50	2.80	1.43	0.979	2.14	3.55	3.02	1.64	0.922	2.23	
0.2	3.37	2.43	1.60	0.979	2.47	3.46	2.73	1.78	0.921	2.53	
0.3	3.25	2.08	1.82	0.978	2.85	3.39	2.44	1.92	0.922	2.83	
0.4	3.13	1.75	2.09	0.975	3.29	3.32	2.15	2.08	0.922	3.17	
0.5	3.02	1.47	2.50	0.970	3.75	3.27	1.83	2.33	0.927	3.59	
0.6	2.93	1.22	2.97	0.962	4.23	3.21	1.53	2.68	0.936	3.97	
0.7	2.85	1.02	3.08	0.956	4.62	3.16	1.27	3.09	0.947	4.46	
0.8	2.78	0.90	3.81	0.953	4.95	3.10	1.03	3.73	0.961	4.85	
0.9	2.74	0.84	4.10	0.958	5.20	3.09	0.867	4.51	0.996	5.33	
1.0	2.71	0.81	4.27	0.975	5.24	3.19	0.743	5.95	1.14	5.82	
$H = 30, V_\infty = 3000, x = 4.7$						$H = 10, V_\infty = 5000, x = 3.6$					
0	3.64	3.23	1.37	1.05	1.83	3.64	3.32	1.56	0.937	1.95	
0.1	3.51	2.77	1.53	1.05	2.19	3.52	2.94	1.71	0.938	2.34	
0.2	3.39	2.32	1.79	1.05	2.59	3.40	2.56	1.89	0.938	2.76	
0.3	3.27	1.90	2.13	1.04	3.07	3.29	2.14	2.12	0.937	3.22	
0.4	3.16	1.53	2.56	1.04	3.57	3.19	1.74	2.44	0.933	3.68	
0.5	3.04	1.19	3.12	1.02	4.20	3.10	1.36	2.86	0.925	4.20	
0.6	2.95	0.99	3.62	1.00	4.68	3.01	1.07	3.52	0.916	4.83	
0.7	2.94	0.87	4.00	0.979	5.05	2.94	0.869	4.23	0.909	5.46	
0.8	2.75	0.82	4.26	0.949	5.26	2.88	0.713	4.96	0.902	6.01	
0.9	2.67	0.80	4.27	0.931	5.32	2.82	0.620	5.47	0.900	6.34	
1.0	2.61	0.78	4.38	0.920	5.37	2.79	0.608	5.63	0.908	6.43	

Table 41 Continued

 $\theta_b = 20^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 10, V_\infty = 5000, x = 4.7$						$H = 10, V_\infty = 3000, x = 2.05$					
0	3.64	3.38	1.69	1.03	1.89	3.64	3.12	1.32	1.00	1.66	
0.1	3.54	2.94	1.88	1.03	2.39	3.53	2.88	1.41	1.00	2.08	
0.2	3.45	2.48	2.14	1.03	2.88	3.43	2.64	1.53	1.00	2.30	
0.3	3.35	1.97	2.52	1.03	3.44	3.35	2.38	1.66	1.00	2.54	
0.4	3.26	1.47	3.07	1.03	4.07	3.27	2.12	1.84	1.00	2.80	
0.5	3.17	1.10	3.80	1.02	4.74	3.21	1.86	2.06	1.00	3.10	
0.6	3.08	0.849	4.65	1.00	5.43	3.14	1.60	2.35	1.01	3.45	
0.7	2.98	0.688	5.53	0.971	6.12	3.09	1.39	2.70	1.02	3.80	
0.8	2.88	0.622	5.79	0.937	6.44	3.04	1.20	3.17	1.04	4.17	
0.9	2.81	0.599	5.70	0.906	6.52	3.08	1.07	3.77	1.11	4.48	
1.0	2.74	0.593	5.59	0.881	6.51	3.24	0.988	4.70	1.29	4.69	
$H = 10, V_\infty = 5000, x = 10$						$H = 10, V_\infty = 3000, x = 3.6$					
0	3.64	3.51	1.99	1.26	1.75	3.64	3.10	1.29	0.976	1.88	
0.1	3.60	2.52	4.12	1.26	2.73	3.50	2.75	1.43	0.976	2.15	
0.2	3.56	1.53	5.96	1.26	4.06	3.37	2.41	1.60	0.975	2.48	
0.3	3.53	0.718	7.07	1.26	5.70	3.25	2.06	1.83	0.974	2.86	
0.4	3.49	0.634	7.51	1.25	6.30	3.13	1.74	2.11	0.971	3.28	
0.5	3.45	0.660	7.18	1.24	6.22	3.02	1.44	2.49	0.967	3.73	
0.6	3.42	0.695	6.80	1.23	6.10	2.93	1.19	2.92	0.960	4.20	
0.7	3.38	0.742	6.45	1.22	5.97	2.85	1.00	3.41	0.952	4.67	
0.8	3.34	0.757	6.26	1.21	5.86	2.78	0.880	3.85	0.952	5.00	
0.9	3.29	0.760	6.12	1.19	5.78	2.74	0.820	4.14	0.956	5.22	
1.0	3.25	0.762	5.99	1.17	5.74	2.71	0.801	4.29	0.968	5.28	
$H = 10, V_\infty = 3000, x = 0.45$						$H = 10, V_\infty = 3000, x = 4.7$					
0	6.58	3.97	3.00	2.76	1.12	3.64	3.15	1.37	1.05	1.83	
0.1	6.54	3.87	3.12	2.83	1.21	3.51	2.71	1.56	1.05	2.18	
0.2	6.54	3.75	3.28	2.91	1.32	3.39	2.26	1.83	1.05	2.61	
0.3	6.55	3.62	3.47	3.00	1.44	3.27	1.87	2.16	1.04	3.08	
0.4	6.58	3.48	3.69	3.09	1.55	3.16	1.50	2.58	1.03	3.60	
0.5	6.62	3.35	3.92	3.20	1.66	3.05	1.19	3.08	1.02	4.14	
0.6	6.67	3.21	4.19	3.32	1.77	2.95	0.990	3.60	1.00	4.67	
0.7	6.71	3.05	4.55	3.45	1.89	2.84	0.866	4.04	0.978	5.09	
0.8	6.77	2.88	5.03	3.60	2.04	2.75	0.799	4.20	0.949	5.31	
0.9	6.82	2.68	5.59	3.77	2.21	2.67	0.771	4.24	0.927	5.38	
1.0	6.87	2.51	6.27	3.97	2.40	2.61	0.771	4.21	0.916	5.40	
$H = 10, V_\infty = 3000, x = 1.75$						$H = 10, V_\infty = 3000, x = 10$					
0	3.64	3.15	1.36	1.05	1.83	3.64	3.34	1.64	1.33	1.67	
0.1	3.54	2.93	1.45	1.04	2.02	3.58	2.28	2.25	1.33	2.58	
0.2	3.46	2.71	1.55	1.04	2.23	3.52	1.50	3.30	1.33	3.58	
0.3	3.41	2.46	1.67	1.04	2.45	3.47	0.975	4.76	1.32	4.68	
0.4	3.32	2.22	1.82	1.04	2.68	3.41	0.851	5.50	1.31	5.10	
0.5	3.26	1.96	2.00	1.04	2.94	3.36	0.850	5.46	1.29	5.15	
0.6	3.21	1.72	2.26	1.05	3.22	3.30	0.856	5.30	1.27	5.10	
0.7	3.16	1.50	2.56	1.06	3.55	3.24	0.877	5.09	1.25	4.99	
0.8	3.18	1.34	3.04	1.11	3.92	3.18	0.893	4.88	1.22	4.92	
0.9	3.26	1.20	3.79	1.21	4.20	3.09	0.900	4.76	1.19	4.89	
1.0	3.53	1.09	4.89	1.47	4.41	3.03	0.912	4.55	1.16	4.91	

Table 41 Concluded

 $\theta_b = 20^\circ$ 

$\lambda$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	$\eta \cdot 10$	$i \cdot 10$	$\rho$	$p \cdot 10$	$\beta$	
$H = 30, V_\infty = 5000, \bar{R} = 0, x = 1.12$						$H = 30, V_\infty = 5000, \bar{R} = 0, x = 3.53$					
0	3.64	3.44	1.68	0.975	1.89	3.64	3.46	1.72	0.999	1.88	
0.1	3.53	3.27	1.76	0.972	2.08	3.52	3.15	1.88	0.999	2.23	
0.2	3.43	3.03	1.84	0.964	2.31	3.42	2.81	2.00	0.999	2.62	
0.3	3.35	2.87	1.94	0.954	2.56	3.32	2.49	2.24	0.998	3.05	
0.4	3.27	2.68	2.02	0.940	2.82	3.21	2.06	2.56	0.991	3.59	
0.5	3.20	2.48	2.08	0.930	2.98	3.11	1.20	3.40	0.981	4.58	
0.6	3.16	2.24	2.21	0.932	3.29	3.01	0.856	4.51	0.968	5.50	
0.7	3.16	1.80	2.56	0.951	3.81	2.91	0.650	5.47	0.940	6.14	
0.8	3.19	1.33	3.22	0.981	4.42	2.82	0.601	5.56	0.896	6.44	
0.9	3.26	1.05	4.08	1.03	4.96	2.74	0.585	5.56	0.865	6.56	
1.0	3.48	0.848	6.14	1.32	5.45	2.68	0.579	5.52	0.851	6.60	
$H = 30, V_\infty = 5000, \bar{R} = 0, x = 1.36$						$H = 30, V_\infty = 5000, \bar{R} = 0, x = 4.7$					
0	3.64	3.42	1.62	0.930	1.93	3.64	3.54	1.93	1.15	1.78	
0.1	3.55	3.21	1.72	0.927	2.13	3.55	3.15	2.17	1.15	2.21	
0.2	3.47	3.02	1.82	0.924	2.37	3.45	2.70	2.46	1.15	2.77	
0.3	3.39	2.81	1.91	0.920	2.64	3.38	2.17	2.80	1.15	3.43	
0.4	3.31	2.59	1.99	0.915	2.90	3.30	1.36	3.73	1.14	4.45	
0.5	3.23	2.34	2.09	0.908	3.13	3.22	0.829	5.28	1.13	5.51	
0.6	3.13	1.97	2.30	0.897	3.53	3.14	0.651	6.42	1.10	6.22	
0.7	3.06	1.49	2.65	0.896	4.04	3.07	0.610	6.58	1.07	6.42	
0.8	3.05	1.13	3.27	0.926	4.68	2.99	0.609	6.37	1.02	6.46	
0.9	3.08	0.887	4.27	0.985	5.31	2.89	0.609	6.05	0.973	6.43	
1.0	3.13	0.726	5.89	1.11	5.89	2.82	0.623	5.64	0.928	6.36	
$H = 30, V_\infty = 5000, \bar{R} = 0, x = 2.63$											
0	3.64	3.40	1.58	0.902	1.95						
0.1	3.50	3.15	1.72	0.904	2.22						
0.2	3.37	2.87	1.86	0.904	2.54						
0.3	3.27	2.60	1.97	0.898	2.87						
0.4	3.17	2.33	2.11	0.892	3.24						
0.5	3.06	1.80	2.42	0.887	3.80						
0.6	2.97	1.21	3.09	0.883	4.52						
0.7	2.89	0.891	3.94	0.881	5.35						
0.8	2.83	0.680	4.94	0.882	6.07						
0.9	2.78	0.600	5.48	0.888	6.44						
1.0	2.73	0.595	5.56	0.878	6.51						

Table 42

 $H = 30, V_\infty = 7500, \theta_b' = 15^\circ, \alpha = 5^\circ$ 

$z$	$p_b \cdot 10$	$\xi_b \cdot 10$						
$\varphi = 0^\circ$								
1	0.882	0	0.760	0.861	0.560	1.00	0.460	0.329
2	0.836	0	0.670	1.00	0.445	1.13	0.352	0.369
3	0.927	0	0.706	1.23	0.420	1.32	0.307	0.413
4	1.05	0	0.768	1.49	0.412	1.53	0.291	0.469
5	1.18	0	0.840	1.75	0.413	1.77	0.276	0.523
6	1.26	0	0.927	2.00	0.420	2.03	0.265	0.583
7	1.25	0	0.989	2.17	0.424	2.22	0.258	0.650
8	1.22	0	1.00	2.21	0.453	2.64	0.254	0.725
9	1.19	0	0.999	2.16	0.475	2.95	0.254	0.808
10	1.18	0	0.984	2.09	0.496	3.24	0.256	0.901
12	1.18	0	0.955	1.98	0.532	3.60	0.265	1.11
14	1.19	0	0.957	1.96	0.548	3.75	0.278	1.36
16	1.20	0	0.963	1.98	0.554	3.66	0.292	1.65
18	1.19	0	0.959	2.04	0.554	3.52	0.309	1.97
20	1.18	0	0.962	2.10	0.553	3.39	0.324	2.31
22	1.18	0	0.960	2.15	0.550	3.29	0.335	2.64
$\varphi = 18^\circ$								
1	0.866	0.330	0.689	1.00	0.513	0.859	0.453	0
2	0.814	0.398	0.582	1.15	0.400	0.963	0.347	0
3	0.898	0.495	0.594	1.40	0.364	1.10	0.301	0
4	1.01	0.596	0.625	1.67	0.351	1.26	0.284	0
5	1.13	0.696	0.666	1.97	0.341	1.44	0.269	0
6	1.22	0.761	0.721	2.27	0.339	1.63	0.257	0
7	1.22	0.763	0.781	2.56	0.340	1.85	0.250	0
8	1.20	0.739	0.827	2.76	0.347	2.10	0.245	0
9	1.17	0.711	0.847	2.83	0.356	2.36	0.244	0
10	1.15	0.692	0.847	2.81	0.368	2.64	0.245	0
12	1.15	0.695	0.832	2.66	0.393	3.20	0.252	0
14	1.16	0.712	0.816	2.53	0.415	3.64	0.263	0
16	1.17	0.731	0.816	2.48	0.430	3.88	0.278	0
18	1.16	0.765	0.816	2.51	0.439	3.93	0.297	0
20	1.16	0.802	0.818	2.55	0.444	3.86	0.315	0
22	1.15	0.840	0.819	2.59	0.448	3.74	0.333	0
$\varphi = 36^\circ$								
1	0.823	0.627	0.620	1.05	0.480	0.624		
2	0.753	0.746	0.505	1.20	0.370	0.700		
3	0.816	0.923	0.497	1.43	0.327	0.790		
4	0.908	1.11	0.503	1.68	0.312	0.903		
5	1.01	1.30	0.521	1.96	0.298	1.01		
6	1.10	1.46	0.546	2.27	0.290	1.14		
7	1.14	1.51	0.581	2.60	0.286	1.28		
8	1.12	1.48	0.619	2.91	0.285	1.43		
9	1.10	1.43	0.653	3.16	0.288	1.61		
10	1.08	1.38	0.677	3.31	0.293	1.80		
12	1.07	1.34	0.691	3.34	0.308	2.23		
14	1.08	1.37	0.689	3.19	0.324	2.70		
16	1.09	1.40	0.681	3.03	0.339	3.14		
18	1.08	1.45	0.673	2.95	0.353	3.50		
20	1.08	1.51	0.674	2.92	0.362	3.73		
22	1.07	1.56	0.675	2.91	0.367	3.84		
$\varphi = 72^\circ$								
$\varphi = 126^\circ$								
$\varphi = 180^\circ$								

Table 43

 $H = 30, V_\infty = 7500, \theta_b = 5^\circ, \alpha = 5^\circ$ 

$z$	$p_b \cdot 10$	$\zeta_b \cdot 10$	$p_b \cdot 10$	$\zeta_b \cdot 10$	$p_b \cdot 10$	$\zeta_b \cdot 10$		
$\varphi = 0^\circ$			$\varphi = 36^\circ$			$\varphi = 72^\circ$		
0.5	0.549	0	0.519	0.582	0.447	0.949		
1.0	0.450	0	0.425	0.626	0.367	1.03		
1.5	0.383	0	0.361	0.661	0.310	1.09		
2.0	0.337	0	0.316	0.691	0.271	1.15		
2.5	0.304	0	0.284	0.719	0.241	1.19		
3.5	0.269	0	0.248	0.781	0.204	1.29		
4.5	0.249	0	0.228	0.842	0.184	1.41		
5.5	0.229	0	0.209	0.899	0.168	1.50		
6.5	0.216	0	0.194	0.948	0.153	1.57		
7.5	0.206	0	0.184	1.00	0.141	1.65		
8.5	0.198	0	0.175	1.05	0.132	1.73		
9.5	0.193	0	0.169	1.10	0.124	1.81		
10.5	0.191	0	0.165	1.16	0.118	1.90		
12.5	0.189	0	0.159	1.27	0.109	2.07		
14.5	0.192	0	0.159	1.39	0.102	2.26		
16.5	0.200	0	0.161	1.52	0.0982	2.46		
18.5	0.213	0	0.162	1.66	0.0953	2.68		
22.5	0.247	0	0.184	1.97	0.0920	3.13		
24.5	0.266	0	0.196	2.12	0.0922	3.40		
26.5	0.284	0	0.205	2.23	0.0925	3.66		
$\varphi = 18^\circ$			$\varphi = 54^\circ$			$\varphi = 90^\circ$		
0.5	0.541	0.305	0.485	0.803	0.408	1.00		
1.0	0.443	0.327	0.398	0.868	0.336	1.10		
1.5	0.377	0.345	0.337	0.918	0.284	1.17		
2.0	0.331	0.360	0.295	0.962	0.245	1.23		
2.5	0.298	0.375	0.264	1.00	0.220	1.29		
3.5	0.263	0.409	0.226	1.08	0.184	1.39		
4.5	0.243	0.443	0.207	1.18	0.164	1.50		
5.5	0.224	0.469	0.189	1.25	0.150	1.62		
6.5	0.210	0.496	0.174	1.31	0.136	1.70		
7.5	0.200	0.524	0.163	1.38	0.124	1.77		
8.5	0.192	0.551	0.154	1.45	0.114	1.85		
9.5	0.187	0.580	0.146	1.52	0.107	1.94		
10.5	0.183	0.609	0.141	1.60	0.100	2.02		
12.5	0.180	0.670	0.133	1.75	0.0902	2.20		
14.5	0.183	0.735	0.129	1.91	0.0827	2.40		
16.5	0.189	0.803	0.127	2.09	0.0767	2.60		
18.5	0.199	0.880	0.127	2.27	0.0724	2.84		
22.5	0.229	1.04	0.133	2.68	0.0654	3.32		
24.5	0.246	1.12	0.137	2.96	0.0630	3.59		
26.5	0.263	1.20	0.143	3.12	0.0613	3.89		

Table 43 Concluded

$H = 30, V_\infty = 7500, \theta_b = 5^\circ, \alpha = 5^\circ$

$z$	$p_b \cdot 10$	$\zeta_b \cdot 10$	$p_b \cdot 10$	$\zeta_b \cdot 10$	$p_b \cdot 10$	$\zeta_b \cdot 10$
$\varphi = 108^\circ$						
0.5	0.373	0.962	0.322	0.603	0.300	0
1.0	0.308	1.06	0.270	0.675	0.258	0
1.5	0.262	1.13	0.233	0.733	0.223	0
2.0	0.228	1.20	0.204	0.781	0.198	0
2.5	0.203	1.26	0.183	0.821	0.178	0
3.5	0.168	1.36	0.153	0.886	0.151	0
4.5	0.148	1.46	0.134	0.941	0.133	0
5.5	0.135	1.57	0.122	0.999	0.121	0
6.5	0.124	1.67	0.113	1.06	0.113	0
7.5	0.112	1.73	0.106	1.11	0.107	0
8.5	0.103	1.79	0.0987	1.13	0.101	0
9.5	0.0955	1.86	0.0916	1.15	0.0958	0
10.5	0.0893	1.94	0.0853	1.16	0.0899	0
12.5	0.0788	2.11	0.0759	1.20	0.0790	0
14.5	0.0711	2.29	0.0689	1.27	0.0703	0
16.5	0.0650	2.49	0.0631	1.36	0.0640	0
18.5	0.0598	2.70	0.0584	1.47	0.0595	0
22.5	0.0515	3.19	0.0509	1.75	0.0532	0
24.5	0.0488	3.46	0.0478	1.92	0.0516	0
26.5	0.0451	3.75	0.0443	2.12	0.0492	0
$\varphi = 126^\circ$						
0.5	0.344	0.825	0.309	0.318		
1.0	0.286	0.916	0.261	0.358		
1.5	0.245	0.989	0.226	0.390		
2.0	0.214	1.05	0.199	0.417		
2.5	0.190	1.10	0.179	0.439		
3.5	0.158	1.19	0.151	0.474		
4.5	0.138	1.27	0.133	0.500		
5.5	0.126	1.36	0.121	0.524		
6.5	0.116	1.45	0.113	0.551		
7.5	0.107	1.51	0.106	0.575		
8.5	0.0982	1.55	0.100	0.590		
9.5	0.0906	1.59	0.0945	0.592		
10.5	0.0844	1.64	0.0884	0.585		
12.5	0.0749	1.76	0.0781	0.576		
14.5	0.0673	1.90	0.0702	0.595		
16.5	0.0612	2.06	0.0643	0.638		
18.5	0.0562	2.24	0.0596	0.693		
22.5	0.0481	2.63	0.0529	0.820		
24.5	0.0443	2.93	0.0505	0.893		
26.5	0.0403	3.22	0.0485	0.973		

Table 44

 $H = 30, V_\infty = 5000, \theta_b = 15^\circ, \alpha = 5^\circ$ 

$z$	$p_b \cdot 10$	$\zeta_b \cdot 10$	$p_b \cdot 10$	$\zeta_b \cdot 10$	$p_b \cdot 10$	$\zeta_b \cdot 10$
$\varphi = 0^\circ$						
1	0.950	0	0.889	0.622	0.751	1.00
2	0.902	0	0.827	0.713	0.668	1.13
3	0.931	0	0.839	0.830	0.632	1.28
4	1.02	0	0.898	0.984	0.640	1.48
5	1.12	0	0.977	1.13	0.673	1.72
6	1.20	0	1.05	1.26	0.715	1.95
7	1.25	0	1.11	1.35	0.758	2.17
8	1.26	0	1.14	1.39	0.799	2.36
9	1.25	0	1.14	1.39	0.835	2.50
10	1.23	0	1.13	1.36	0.857	2.57
11	1.22	0	1.12	1.33	0.865	2.58
12	1.21	0	1.11	1.31	0.862	2.55
13	1.21	0	1.10	1.30	0.857	2.51
14	1.21	0	1.10	1.30	0.854	2.46
15	1.22	0	1.10	1.30	0.850	2.42
16	1.22	0	1.10	1.31	0.847	2.39
18	1.21	0	1.10	1.33	0.840	2.36
20	1.21	0	1.10	1.36	0.842	2.36
22	1.21	0	1.10	1.39	0.844	2.37
24	1.21	0	1.10	1.41	0.844	2.39
$\varphi = 18^\circ$						
1	0.934	0.327	0.824	0.855	0.679	1.05
2	0.882	0.377	0.751	0.973	0.590	1.18
3	0.904	0.447	0.737	1.11	0.538	1.31
4	0.991	0.528	0.772	1.31	0.526	1.50
5	1.08	0.604	0.830	1.52	0.538	1.72
6	1.16	0.666	0.891	1.71	0.558	1.96
7	1.22	0.705	0.948	1.87	0.585	2.21
8	1.23	0.713	0.993	1.98	0.612	2.44
9	1.22	0.702	1.01	2.03	0.640	2.65
10	1.20	0.689	1.01	2.02	0.666	2.83
11	1.19	0.678	1.00	1.98	0.689	2.96
12	1.18	0.672	0.999	1.94	0.704	3.03
13	1.18	0.670	0.992	1.91	0.712	3.05
14	1.18	0.672	0.987	1.89	0.713	3.02
15	1.19	0.675	0.984	1.88	0.711	2.98
16	1.19	0.679	0.985	1.87	0.709	2.93
18	1.18	0.696	0.982	1.89	0.705	2.83
20	1.19	0.715	0.985	1.92	0.702	2.77
22	1.18	0.732	0.985	1.95	0.700	2.73
24	1.18	0.747	0.986	1.97	0.701	2.71
$\varphi = 36^\circ$						
1	0.889	0.622	0.751	1.00		
2	0.827	0.713	0.668	1.13		
3	0.839	0.830	0.632	1.28		
4	0.898	0.984	0.640	1.48		
5	0.977	1.13	0.673	1.72		
6	1.05	1.26	0.715	1.95		
7	1.11	1.35	0.758	2.17		
8	1.14	1.39	0.799	2.36		
9	1.14	1.39	0.835	2.50		
10	1.13	1.36	0.857	2.57		
11	1.12	1.33	0.865	2.58		
12	1.11	1.31	0.862	2.55		
13	1.10	1.30	0.857	2.51		
14	1.10	1.30	0.854	2.46		
15	1.10	1.30	0.850	2.42		
16	1.10	1.31	0.847	2.39		
18	1.10	1.33	0.840	2.36		
20	1.10	1.36	0.842	2.36		
22	1.10	1.39	0.844	2.37		
24	1.10	1.41	0.844	2.39		
$\varphi = 72^\circ$						
1	0.751	1.00				
2	0.668	1.13				
3	0.632	1.28				
4	0.640	1.48				
5	0.673	1.72				
6	0.715	1.95				
7	0.758	2.17				
8	0.799	2.36				
9	0.835	2.50				
10	0.857	2.57				
11	0.865	2.58				
12	0.862	2.55				
13	0.857	2.51				
14	0.854	2.46				
15	0.850	2.42				
16	0.847	2.39				
18	0.840	2.36				
20	0.842	2.36				
22	0.844	2.37				
24	0.844	2.39				
$\varphi = 90^\circ$						
1	0.679	1.05				
2	0.590	1.18				
3	0.538	1.31				
4	0.526	1.50				
5	0.538	1.72				
6	0.558	1.96				
7	0.585	2.21				
8	0.612	2.44				
9	0.640	2.65				
10	0.666	2.83				
11	0.689	2.96				
12	0.704	3.03				
13	0.712	3.05				
14	0.713	3.02				
15	0.711	2.98				
16	0.709	2.93				
18	0.705	2.83				
20	0.702	2.77				
22	0.700	2.73				
24	0.701	2.71				
$\varphi = 18^\circ$						
1	0.934	0.327	0.824	0.855	0.679	1.05
2	0.882	0.377	0.751	0.973	0.590	1.18
3	0.904	0.447	0.737	1.11	0.538	1.31
4	0.991	0.528	0.772	1.31	0.526	1.50
5	1.08	0.604	0.830	1.52	0.538	1.72
6	1.16	0.666	0.891	1.71	0.558	1.96
7	1.22	0.705	0.948	1.87	0.585	2.21
8	1.23	0.713	0.993	1.98	0.612	2.44
9	1.22	0.702	1.01	2.03	0.640	2.65
10	1.20	0.689	1.01	2.02	0.666	2.83
11	1.19	0.678	1.00	1.98	0.689	2.96
12	1.18	0.672	0.999	1.94	0.704	3.03
13	1.18	0.670	0.992	1.91	0.712	3.05
14	1.18	0.672	0.987	1.89	0.713	3.02
15	1.19	0.675	0.984	1.88	0.711	2.98
16	1.19	0.679	0.985	1.87	0.709	2.93
18	1.18	0.696	0.982	1.89	0.705	2.83
20	1.19	0.715	0.985	1.92	0.702	2.77
22	1.18	0.732	0.985	1.95	0.700	2.73
24	1.18	0.747	0.986	1.97	0.701	2.71
$\varphi = 54^\circ$						
1	0.934	0.327	0.824	0.855	0.679	1.05
2	0.882	0.377	0.751	0.973	0.590	1.18
3	0.904	0.447	0.737	1.11	0.538	1.31
4	0.991	0.528	0.772	1.31	0.526	1.50
5	1.08	0.604	0.830	1.52	0.538	1.72
6	1.16	0.666	0.891	1.71	0.558	1.96
7	1.22	0.705	0.948	1.87	0.585	2.21
8	1.23	0.713	0.993	1.98	0.612	2.44
9	1.22	0.702	1.01	2.03	0.640	2.65
10	1.20	0.689	1.01	2.02	0.666	2.83
11	1.19	0.678	1.00	1.98	0.689	2.96
12	1.18	0.672	0.999	1.94	0.704	3.03
13	1.18	0.670	0.992	1.91	0.712	3.05
14	1.18	0.672	0.987	1.89	0.713	3.02
15	1.19	0.675	0.984	1.88	0.711	2.98
16	1.19	0.679	0.985	1.87	0.709	2.93
18	1.18	0.696	0.982	1.89	0.705	2.83
20	1.19	0.715	0.985	1.92	0.702	2.77
22	1.18	0.732	0.985	1.95	0.700	2.73
24	1.18	0.747	0.986	1.97	0.701	2.71
$\varphi = 90^\circ$						
1	0.934	0.327	0.824	0.855	0.679	1.05
2	0.882	0.377	0.751	0.973	0.590	1.18
3	0.904	0.447	0.737	1.11	0.538	1.31
4	0.991	0.528	0.772	1.31	0.526	1.50
5	1.08	0.604	0.830	1.52	0.538	1.72
6	1.16	0.666	0.891	1.71	0.558	1.96
7	1.22	0.705	0.948	1.87	0.585	2.21
8	1.23	0.713	0.993	1.98	0.612	2.44
9	1.22	0.702	1.01	2.03	0.640	2.65
10	1.20	0.689	1.01	2.02	0.666	2.83
11	1.19	0.678	1.00	1.98	0.689	2.96
12	1.18	0.672	0.999	1.94	0.704	3.03
13	1.18	0.670	0.992	1.91	0.712	3.05
14	1.18	0.672	0.987	1.89	0.713	3.02
15	1.19	0.675	0.984	1.88	0.711	2.98
16	1.19	0.679	0.985	1.87	0.709	2.93
18	1.18	0.696	0.982	1.89	0.705	2.83
20	1.19	0.715	0.985	1.92	0.702	2.77
22	1.18	0.732	0.985	1.95	0.700	2.73
24	1.18	0.747	0.986	1.97	0.701	2.71

Table 44 Concluded

$H = 30, V_\infty = 5000, \theta_b = 15^\circ, \alpha = 5^\circ$

$z$	$p_b \cdot 10$	$\xi_b \cdot 10$	$p_b \cdot 10$	$\xi_b \cdot 10$	$p_b \cdot 10$	$\xi_b \cdot 10$
$\varphi = 108^\circ$						
1	0.615	1.00	0.528	0.623	0.498	0
2	0.524	1.12	0.439	0.694	0.413	0
3	0.467	1.23	0.381	0.757	0.357	0
4	0.438	1.38	0.341	0.822	0.315	0
5	0.435	1.56	0.320	0.907	0.290	0
6	0.439	1.77	0.312	1.01	0.277	0
7	0.450	1.99	0.307	1.12	0.270	0
8	0.465	2.22	0.305	1.24	0.265	0
9	0.481	2.45	0.306	1.37	0.262	0
10	0.497	2.67	0.310	1.51	0.262	0
11	0.514	2.88	0.315	1.66	0.264	0
12	0.531	3.06	0.321	1.81	0.267	0
13	0.546	3.20	0.327	1.97	0.271	0
14	0.559	3.30	0.333	2.13	0.276	0
15	0.569	3.35	0.340	2.29	0.281	0
16	0.574	3.37	0.346	2.45	0.287	0
18	0.577	3.32	0.361	2.76	0.300	0
20	0.576	3.23	0.374	3.03	0.313	0
22	0.577	3.13	0.388	3.23	0.327	0
24	0.577	3.05	0.390	3.35	0.341	0
$\varphi = 126^\circ$						
1	0.564	0.857	0.506	0.328		
2	0.474	0.954	0.420	0.366		
3	0.415	1.04	0.363	0.398		
4	0.378	1.14	0.321	0.429		
5	0.364	1.28	0.297	0.469		
6	0.361	1.44	0.285	0.519		
7	0.360	1.61	0.279	0.573		
8	0.365	1.79	0.274	0.630		
9	0.372	1.99	0.272	0.693		
10	0.381	2.19	0.273	0.763		
11	0.390	2.39	0.276	0.838		
12	0.400	2.59	0.280	0.916		
13	0.410	2.78	0.285	0.998		
14	0.420	2.96	0.289	1.08		
15	0.430	3.12	0.295	1.17		
16	0.439	3.26	0.300	1.26		
18	0.456	3.44	0.313	1.46		
20	0.466	3.51	0.326	1.68		
22	0.470	3.48	0.338	1.91		
24	0.470	3.41	0.349	2.14		

Table 45

 $H = 30, V_\infty = 5000, \theta_b = 10^\circ, \alpha = 5^\circ$ 

$z$	$p_b \cdot 10$	$\xi_b \cdot 10$						
$\varphi = 0^\circ$								
1	0.676	0	0.593	0.850	0.451	1.02	0.375	0.337
2	0.580	0	0.498	0.937	0.368	1.13	0.307	0.382
3	0.519	0	0.436	1.01	0.313	1.22	0.262	0.413
4	0.494	0	0.398	1.09	0.271	1.29	0.226	0.436
5	0.495	0	0.385	1.20	0.243	1.38	0.198	0.455
6	0.505	0	0.381	1.31	0.227	1.48	0.178	0.475
7	0.526	0	0.383	1.43	0.217	1.60	0.164	0.502
8	0.552	0	0.390	1.56	0.208	1.72	0.154	0.534
9	0.582	0	0.401	1.70	0.201	1.85	0.147	0.569
10	0.614	0	0.414	1.83	0.196	1.98	0.141	0.605
12	0.679	0	0.445	2.08	0.192	2.28	0.131	0.675
14	0.726	0	0.482	2.32	0.190	2.60	0.124	0.754
16	0.739	0	0.516	2.50	0.189	2.92	0.119	0.848
18	0.733	0	0.538	2.58	0.189	3.26	0.116	0.956
20	0.722	0	0.545	2.57	0.190	3.60	0.114	1.07
22	0.712	0	0.545	2.50	0.191	3.92	0.113	1.20
$\varphi = 18^\circ$								
1	0.666	0.323	0.544	1.00	0.416	0.874	0.370	0
2	0.569	0.356	0.451	1.11	0.339	0.977	0.304	0
3	0.508	0.387	0.390	1.19	0.287	1.05	0.259	0
4	0.481	0.423	0.349	1.28	0.248	1.11	0.224	0
5	0.480	0.469	0.329	1.39	0.219	1.17	0.196	0
6	0.488	0.516	0.320	1.52	0.200	1.25	0.176	0
7	0.506	0.567	0.314	1.65	0.188	1.34	0.161	0
8	0.529	0.619	0.314	1.80	0.179	1.44	0.151	0
9	0.556	0.669	0.317	1.95	0.172	1.54	0.144	0
10	0.586	0.718	0.322	2.10	0.166	1.64	0.138	0
12	0.647	0.807	0.335	2.41	0.157	1.87	0.129	0
14	0.695	0.866	0.353	2.71	0.152	2.13	0.121	0
16	0.714	0.878	0.375	3.00	0.148	2.42	0.116	0
18	0.711	0.859	0.397	3.22	0.145	2.72	0.114	0
20	0.702	0.838	0.415	3.35	0.143	3.04	0.112	0
22	0.692	0.818	0.427	3.38	0.141	3.38	0.111	0
$\varphi = 36^\circ$								
1	0.636	0.614	0.495	1.06	0.390	0.641		
2	0.540	0.678	0.406	1.17	0.319	0.721		
3	0.478	0.736	0.348	1.26	0.271	0.778		
4	0.446	0.802	0.305	1.35	0.233	0.821		
5	0.439	0.886	0.280	1.45	0.205	0.860		
6	0.442	0.973	0.267	1.58	0.185	0.907		
7	0.452	1.06	0.258	1.71	0.172	0.965		
8	0.469	1.16	0.252	1.84	0.162	1.03		
9	0.489	1.26	0.248	1.99	0.155	1.10		
10	0.511	1.35	0.248	2.14	0.149	1.17		
12	0.561	1.53	0.249	2.47	0.139	1.32		
14	0.610	1.68	0.254	2.80	0.132	1.49		
16	0.639	1.74	0.261	3.13	0.128	1.69		
18	0.645	1.73	0.270	3.45	0.125	1.91		
20	0.642	1.69	0.280	3.73	0.122	2.15		
22	0.634	1.64	0.290	3.94	0.119	2.41		
$\varphi = 54^\circ$								
1	0.676	0	0.593	0.850	0.451	1.02	0.375	0.337
2	0.580	0	0.498	0.937	0.368	1.13	0.307	0.382
3	0.519	0	0.436	1.01	0.313	1.22	0.262	0.413
4	0.494	0	0.398	1.09	0.271	1.29	0.226	0.436
5	0.495	0	0.385	1.20	0.243	1.38	0.198	0.455
6	0.505	0	0.381	1.31	0.227	1.48	0.178	0.475
7	0.526	0	0.383	1.43	0.217	1.60	0.164	0.502
8	0.552	0	0.390	1.56	0.208	1.72	0.154	0.534
9	0.582	0	0.401	1.70	0.201	1.85	0.147	0.569
10	0.614	0	0.414	1.83	0.196	1.98	0.141	0.605
12	0.679	0	0.445	2.08	0.192	2.28	0.131	0.675
14	0.726	0	0.482	2.32	0.190	2.60	0.124	0.754
16	0.739	0	0.516	2.50	0.189	2.92	0.119	0.848
18	0.733	0	0.538	2.58	0.189	3.26	0.116	0.956
20	0.722	0	0.545	2.57	0.190	3.60	0.114	1.07
22	0.712	0	0.545	2.50	0.191	3.92	0.113	1.20
$\varphi = 108^\circ$								
1	0.676	0	0.593	0.850	0.451	1.02	0.375	0.337
2	0.580	0	0.498	0.937	0.368	1.13	0.307	0.382
3	0.519	0	0.436	1.01	0.313	1.22	0.262	0.413
4	0.494	0	0.398	1.09	0.271	1.29	0.226	0.436
5	0.495	0	0.385	1.20	0.243	1.38	0.198	0.455
6	0.505	0	0.381	1.31	0.227	1.48	0.178	0.475
7	0.526	0	0.383	1.43	0.217	1.60	0.164	0.502
8	0.552	0	0.390	1.56	0.208	1.72	0.154	0.534
9	0.582	0	0.401	1.70	0.201	1.85	0.147	0.569
10	0.614	0	0.414	1.83	0.196	1.98	0.141	0.605
12	0.679	0	0.445	2.08	0.192	2.28	0.131	0.675
14	0.726	0	0.482	2.32	0.190	2.60	0.124	0.754
16	0.739	0	0.516	2.50	0.189	2.92	0.119	0.848
18	0.733	0	0.538	2.58	0.189	3.26	0.116	0.956
20	0.722	0	0.545	2.57	0.190	3.60	0.114	1.07
22	0.712	0	0.545	2.50	0.191	3.92	0.113	1.20
$\varphi = 162^\circ$								
1	0.676	0	0.593	0.850	0.451	1.02	0.375	0.337
2	0.580	0	0.498	0.937	0.368	1.13	0.307	0.382
3	0.519	0	0.436	1.01	0.313	1.22	0.262	0.413
4	0.494	0	0.398	1.09	0.271	1.29	0.226	0.436
5	0.495	0	0.385	1.20	0.243	1.38	0.198	0.455
6	0.505	0	0.381	1.31	0.227	1.48	0.178	0.475
7	0.526	0	0.383	1.43	0.217	1.60	0.164	0.502
8	0.552	0	0.390	1.56	0.208	1.72	0.154	0.534
9	0.582	0	0.401	1.70	0.201	1.85	0.147	0.569
10	0.614	0	0.414	1.83	0.196	1.98	0.141	0.605
12	0.679	0	0.445	2.08	0.192	2.28	0.131	0.675
14	0.726	0	0.482	2.32	0.190	2.60	0.124	0.754
16	0.739	0	0.516	2.50	0.189	2.92	0.119	0.848
18	0.733	0	0.538	2.58	0.189	3.26	0.116	0.956
20	0.722	0	0.545	2.57	0.190	3.60	0.114	1.07
22	0.712	0	0.545	2.50	0.191	3.92	0.113	1.20
$\varphi = 126^\circ$								
1	0.666	0.323	0.544	1.00	0.416	0.874	0.370	0
2	0.569	0.356	0.451	1.11	0.339	0.977	0.304	0
3	0.508	0.387	0.390	1.19	0.287	1.05	0.259	0
4	0.481	0.423	0.349	1.28	0.248	1.11	0.224	0
5	0.480	0.469	0.329	1.39	0.219	1.17	0.196	0
6	0.488	0.516	0.320	1.52	0.200	1.25	0.176	0
7	0.506	0.567	0.314	1.65	0.188	1.34	0.161	0
8	0.529	0.619	0.314	1.80	0.179	1.44	0.151	0
9	0.556	0.669	0.317	1.95	0.172	1.54	0.144	0
10	0.586	0.718	0.322	2.10	0.166	1.64	0.138	0
12	0.647	0.807	0.335	2.41	0.157	1.87	0.129	0
14	0.695	0.866	0.353	2.71	0.152	2.13	0.121	0
16	0.714	0.878	0.375	3.00	0.148	2.42	0.116	0
18	0.711	0.859	0.397	3.22	0.145	2.72	0.114	0
20	0.702	0.838	0.415	3.35	0.143	3.04	0.112	0
22	0.692	0.818	0.427	3.38	0.141	3.38	0.111	0
$\varphi = 180^\circ$								
1	0.636	0.614	0.495	1.06	0.390	0.641		
2	0.540	0.678	0.406	1.17	0.319	0.721		
3	0.478	0.736	0.348	1.26	0.271	0.778		
4	0.446	0.802	0.305	1.35	0.233	0.821		
5	0.439	0.886	0.280	1.45	0.205	0.860		
6	0.442	0.973	0.267	1.58	0.185	0.907		
7	0.452	1.06	0.258	1.71	0.172	0.965		
8	0.469	1.16	0.252	1.84	0.162	1.03		
9	0.489	1.26	0.248	1.99	0.155	1.10		
10	0.511	1.35	0.248	2.14	0.149	1.17		
12	0.561	1.53	0.249	2.47	0.139	1.32		
14	0.610	1.68	0.254	2.80	0.132	1.49		
16	0.639	1.74	0.261	3.13	0.128	1.69		
18	0.645	1.73	0.270	3.45	0.125	1.91		
20	0.642	1.69	0.280	3.73	0.122	2.15		
22	0.634	1.64	0.290	3.94	0.119	2.41		

Table 46

 $H = 30, V_\infty = 5000, \theta_b = 5^\circ, \alpha = 5^\circ$ 

$z$	$p_b \cdot 10$	$\zeta_b \cdot 10$						
$\varphi = 0^\circ$								
1	0.493	0	0.435	0.866	0.335	1.05	0.282	0.356
2	0.401	0	0.351	0.960	0.271	1.20	0.235	0.418
4	0.292	0	0.251	1.07	0.193	1.37	0.178	0.487
6	0.244	0	0.201	1.17	0.146	1.48	0.139	0.498
8	0.223	0	0.178	1.30	0.121	1.61	0.114	0.498
10	0.211	0	0.162	1.41	0.106	1.76	0.0984	0.518
12	0.208	0	0.153	1.54	0.0946	1.90	0.0885	0.562
14	0.210	0	0.148	1.67	0.0856	2.04	0.0816	0.608
16	0.215	0	0.146	1.81	0.0789	2.21	0.0761	0.645
20	0.233	0	0.145	2.09	0.0687	2.57	0.0674	0.706
24	0.262	0	0.152	2.39	0.0609	2.96	0.0614	0.796
28	0.293	0	0.162	2.69	0.0548	3.39	0.0573	0.924
32	0.319	0	0.173	2.96	0.0495	3.86	0.0542	1.08
36	0.335	0	0.185	3.19	0.0448	4.33	0.0516	1.29
40	0.340	0	0.195	3.37	0.0404	4.76	0.0489	1.58
$\varphi = 18^\circ$								
1	0.485	0.326	0.400	1.03	0.310	0.912	0.278	0
2	0.395	0.359	0.322	1.15	0.253	1.05	0.234	0
4	0.287	0.401	0.229	1.29	0.183	1.21	0.179	0
6	0.238	0.443	0.178	1.41	0.139	1.29	0.140	0
8	0.217	0.489	0.155	1.55	0.114	1.37	0.115	0
10	0.204	0.535	0.138	1.69	0.0996	1.49	0.0984	0
12	0.200	0.585	0.127	1.83	0.0890	1.62	0.0883	0
14	0.201	0.636	0.120	1.99	0.0803	1.73	0.0817	0
16	0.205	0.689	0.115	2.15	0.0735	1.86	0.0766	0
20	0.220	0.796	0.109	2.48	0.0636	2.17	0.0683	0
24	0.245	0.905	0.108	2.85	0.0558	2.53	0.0619	0
28	0.274	1.00	0.109	3.23	0.0491	2.95	0.0579	0
32	0.299	1.08	0.111	3.59	0.0431	3.42	0.0554	0
36	0.316	1.13	0.113	3.90	0.0375	3.92	0.0536	0
40	0.323	1.17	0.113	4.16	0.0325	4.37	0.0523	0
$\varphi = 36^\circ$								
1	0.465	0.625	0.366	1.09	0.292	0.672		
2	0.377	0.689	0.295	1.23	0.242	0.783		
4	0.272	0.769	0.208	1.40	0.179	0.909		
6	0.223	0.847	0.159	1.51	0.138	0.948		
8	0.200	0.936	0.135	1.66	0.112	0.979		
10	0.186	1.02	0.119	1.82	0.0971	1.04		
12	0.180	1.11	0.107	1.96	0.0883	1.13		
14	0.177	1.21	0.0992	2.13	0.0806	1.21		
16	0.178	1.31	0.0929	2.30	0.0742	1.29		
20	0.186	1.51	0.0836	2.66	0.0650	1.47		
24	0.203	1.72	0.0776	3.05	0.0584	1.71		
28	0.223	1.93	0.0736	3.48	0.0529	2.03		
32	0.245	2.10	0.0705	3.92	0.0476	2.43		
36	0.263	2.23	0.0677	4.33	0.0421	2.95		
40	0.275	2.32	0.0637	4.65	0.0360	3.60		
$\varphi = 90^\circ$								
$\varphi = 144^\circ$								

Table 47

 $M_{\infty} = \infty, \gamma = 1.4, \theta_b = 15^\circ, \alpha = 5^\circ$ 

$z$	$p_b \cdot 10$	$\zeta_b \cdot 10$						
$\varphi = 0^\circ$								
0.5	1.00	0	0.879	0.796	0.657	0.932	0.532	0.302
1.0	0.939	0	0.805	0.842	0.584	0.986	0.470	0.323
1.5	0.874	0	0.744	0.884	0.526	1.02	0.424	0.339
2.0	0.834	0	0.710	0.920	0.490	1.07	0.390	0.352
2.5	0.812	0	0.672	0.945	0.461	1.12	0.374	0.368
3	0.821	0	0.660	0.988	0.441	1.14	0.356	0.380
4	0.861	0	0.670	1.10	0.406	1.21	0.305	0.389
5	0.939	0	0.694	1.22	0.395	1.32	0.277	0.410
6	1.03	0	0.748	1.38	0.385	1.42	0.267	0.443
7	1.13	0	0.810	1.55	0.385	1.55	0.253	0.467
8	1.21	0	0.868	1.70	0.386	1.69	0.241	0.495
9	1.25	0	0.932	1.84	0.399	1.86	0.237	0.531
10	1.25	0	0.980	1.94	0.416	2.05	0.233	0.565
12	1.21	0	0.999	1.95	0.448	2.42	0.226	0.638
14	1.18	0	0.972	1.85	0.483	2.77	0.231	0.742
16	1.18	0	0.952	1.77	0.519	3.04	0.240	0.857
$\varphi = 18^\circ$								
0.5	0.986	0.304	0.802	0.934	0.599	0.793	0.523	0
1.0	0.922	0.321	0.721	0.989	0.531	0.842	0.462	0
1.5	0.857	0.339	0.667	1.03	0.477	0.879	0.417	0
2.0	0.819	0.350	0.630	1.08	0.446	0.917	0.384	0
2.5	0.793	0.364	0.603	1.11	0.430	0.958	0.367	0
3	0.800	0.386	0.573	1.14	0.401	0.979	0.350	0
4	0.835	0.434	0.571	1.26	0.351	1.01	0.300	0
5	0.905	0.493	0.575	1.39	0.339	1.10	0.270	0
6	1.00	0.560	0.595	1.54	0.324	1.18	0.260	0
7	1.08	0.616	0.638	1.73	0.315	1.27	0.247	0
8	1.17	0.667	0.681	1.93	0.313	1.37	0.234	0
9	1.22	0.693	0.722	2.10	0.310	1.48	0.228	0
10	1.22	0.691	0.768	2.27	0.313	1.61	0.225	0
12	1.18	0.657	0.836	2.48	0.332	1.91	0.216	0
14	1.15	0.632	0.842	2.47	0.350	2.23	0.218	0
16	1.15	0.627	0.824	2.35	0.370	2.55	0.226	0
$\varphi = 36^\circ$								
0.5	0.943	0.578	0.725	0.980	0.558	0.574		
1.0	0.874	0.611	0.650	1.03	0.493	0.613		
1.5	0.811	0.643	0.590	1.08	0.444	0.642		
2.0	0.774	0.667	0.547	1.14	0.411	0.668		
2.5	0.742	0.690	0.516	1.17	0.395	0.698		
3	0.741	0.727	0.498	1.19	0.373	0.718		
4	0.765	0.815	0.482	1.30	0.320	0.736		
5	0.814	0.918	0.473	1.42	0.299	0.790		
6	0.895	1.04	0.476	1.55	0.288	0.850		
7	0.969	1.15	0.486	1.71	0.273	0.900		
8	1.04	1.26	0.513	1.90	0.266	0.965		
9	1.11	1.33	0.541	2.11	0.263	1.03		
10	1.13	1.36	0.567	2.30	0.258	1.10		
12	1.11	1.30	0.625	2.65	0.261	1.28		
14	1.08	1.24	0.674	2.88	0.272	1.50		
16	1.07	1.22	0.689	2.91	0.284	1.73		
$\varphi = 90^\circ$								
$\varphi = 144^\circ$								

Table 48

 $M_\infty = \infty, Y = 1.4, \theta_b = 10^\circ, \alpha = 5^\circ$ 

$z$	$p_b \cdot 10$	$\xi_b \cdot 10$						
$\varphi = 0^\circ$								
0.5	0.727	0	0.635	0.791	0.469	0.936	0.377	0.305
1.0	0.652	0	0.563	0.839	0.412	1.00	0.333	0.332
1.5	0.584	0	0.501	0.875	0.367	1.05	0.302	0.355
2	0.553	0	0.469	0.912	0.332	1.09	0.274	0.371
3	0.483	0	0.412	0.955	0.303	1.18	0.243	0.399
4	0.452	0	0.368	0.990	0.257	1.21	0.220	0.420
5	0.436	0	0.350	1.04	0.226	1.24	0.190	0.423
6	0.431	0	0.334	1.10	0.213	1.31	0.166	0.426
7	0.433	0	0.327	1.17	0.198	1.36	0.153	0.441
8	0.447	0	0.323	1.24	0.183	1.40	0.145	0.462
9	0.471	0	0.326	1.32	0.174	1.46	0.136	0.478
10	0.498	0	0.335	1.43	0.169	1.54	0.127	0.485
12	0.559	0	0.358	1.65	0.159	1.69	0.111	0.502
14	0.637	0	0.388	1.87	0.152	1.85	0.102	0.545
16	0.714	0	0.427	2.11	0.150	2.07	0.0975	0.592
18	0.738	0	0.470	2.34	0.149	2.31	0.0921	0.629
20	0.726	0	0.506	2.50	0.150	2.58	0.0867	0.666
$\varphi = 18^\circ$								
0.5	0.716	0.302	0.578	0.932	0.427	0.798	0.371	0
1.0	0.641	0.319	0.510	0.992	0.374	0.861	0.327	0
1.5	0.573	0.332	0.453	1.04	0.335	0.908	0.297	0
2	0.543	0.345	0.419	1.08	0.303	0.942	0.270	0
3	0.473	0.350	0.374	1.14	0.274	1.02	0.240	0
4	0.441	0.370	0.323	1.17	0.239	1.06	0.218	0
5	0.425	0.402	0.305	1.24	0.204	1.07	0.189	0
6	0.418	0.428	0.286	1.29	0.187	1.11	0.165	0
7	0.418	0.457	0.274	1.36	0.177	1.17	0.151	0
8	0.429	0.493	0.267	1.44	0.164	1.20	0.142	0
9	0.450	0.535	0.262	1.52	0.151	1.23	0.135	0
10	0.475	0.580	0.261	1.61	0.143	1.28	0.126	0
12	0.530	0.666	0.269	1.84	0.134	1.40	0.109	0
14	0.602	0.758	0.283	2.10	0.125	1.52	0.0997	0
16	0.669	0.835	0.299	2.36	0.118	1.65	0.0952	0
18	0.699	0.877	0.320	2.65	0.114	1.82	0.0908	0
20	0.693	0.910	0.344	2.93	0.112	2.01	0.0855	0
$\varphi = 36^\circ$								
0.5	0.683	0.573	0.521	0.980	0.396	0.581		
1.0	0.610	0.607	0.457	1.05	0.349	0.631		
1.5	0.544	0.633	0.406	1.10	0.315	0.670		
2	0.513	0.660	0.371	1.14	0.284	0.696		
3	0.447	0.687	0.337	1.22	0.254	0.749		
4	0.410	0.721	0.284	1.24	0.227	0.788		
5	0.393	0.764	0.262	1.30	0.194	0.792		
6	0.382	0.810	0.246	1.36	0.172	0.808		
7	0.375	0.862	0.229	1.41	0.161	0.846		
8	0.382	0.921	0.219	1.48	0.152	0.883		
9	0.395	0.996	0.213	1.56	0.141	0.905		
10	0.413	1.07	0.207	1.64	0.131	0.922		
12	0.454	1.24	0.201	1.83	0.117	0.985		
14	0.507	1.41	0.203	2.07	0.111	1.08		
16	0.569	1.58	0.208	2.33	0.104	1.16		
18	0.617	1.70	0.214	2.61	0.0976	1.24		
20	0.633	1.73	0.221	2.91	0.0934	1.34		

Table 49

 $M_\infty = 6, \gamma = 1.4, \theta_b = 10^\circ, \alpha = 10^\circ$ 

$z$	$p_b \cdot 10$	$\zeta_b \cdot 10$						
$\varphi = 0^\circ$								
0.5	1.31	0	1.02	1.63	0.590	1.93	0.394	0.637
1.0	1.20	0	0.935	1.73	0.537	2.11	0.371	0.720
1.5	1.13	0	0.864	1.80	0.489	2.24	0.350	0.791
2	1.09	0	0.817	1.87	0.448	2.34	0.331	0.849
3	1.08	0	0.774	2.01	0.392	2.51	0.299	0.929
4	1.12	0	0.772	2.18	0.359	2.69	0.276	0.982
5	1.18	0	0.787	2.35	0.339	2.88	0.259	1.02
6	1.24	0	0.811	2.53	0.328	3.08	0.247	1.06
7	1.29	0	0.838	2.69	0.319	3.28	0.238	1.10
8	1.33	0	0.862	2.83	0.312	3.49	0.232	1.15
9	1.35	0	0.884	2.94	0.307	3.70	0.228	1.21
10	1.37	0	0.901	3.02	0.304	3.90	0.226	1.28
12	1.36	0	0.918	3.12	0.300	4.29	0.224	1.43
14	1.36	0	0.932	3.16	0.297	4.60	0.222	1.60
16	1.36	0	0.941	3.17	0.296	4.84	0.220	1.79
18	1.36	0	0.943	3.18	0.298	4.99	0.217	2.02
20	1.36	0	0.943	3.17	0.301	5.08	0.212	2.30
$\varphi = 18^\circ$								
0.5	1.27	0.622	0.867	1.92	0.495	1.65	0.382	0
1.0	1.17	0.656	0.786	2.05	0.455	1.82	0.362	0
1.5	1.09	0.682	0.720	2.14	0.417	1.96	0.344	0
2	1.05	0.709	0.672	2.22	0.383	2.06	0.328	0
3	1.04	0.768	0.619	2.39	0.332	2.23	0.301	0
4	1.07	0.835	0.601	2.58	0.299	2.38	0.281	0
5	1.12	0.904	0.599	2.77	0.278	2.54	0.265	0
6	1.18	0.967	0.605	2.97	0.263	2.71	0.255	0
7	1.23	1.01	0.615	3.17	0.253	2.89	0.246	0
8	1.26	1.05	0.627	3.26	0.245	3.07	0.240	0
9	1.29	1.08	0.639	3.53	0.237	3.26	0.236	0
10	1.31	1.10	0.651	3.67	0.230	3.46	0.233	0
12	1.30	1.12	0.667	3.85	0.219	3.85	0.232	0
14	1.30	1.13	0.681	3.95	0.210	4.22	0.234	0
16	1.30	1.15	0.693	3.99	0.202	4.55	0.238	0
18	1.30	1.17	0.701	4.00	0.197	4.80	0.242	0
20	1.30	1.19	0.707	3.99	0.194	4.97	0.246	0
$\varphi = 36^\circ$								
0.5	1.17	1.18	0.716	2.02	0.430	1.20		
1.0	1.07	1.25	0.649	2.18	0.401	1.35		
1.5	0.999	1.30	0.591	2.29	0.373	1.47		
2	0.956	1.35	0.545	2.39	0.346	1.56		
3	0.928	1.46	0.487	2.56	0.304	1.70		
4	0.944	1.58	0.459	2.75	0.275	1.81		
5	0.980	1.71	0.446	2.95	0.255	1.91		
6	1.02	1.83	0.440	3.16	0.241	2.02		
7	1.06	1.94	0.438	3.37	0.231	2.14		
8	1.09	2.03	0.438	3.58	0.224	2.28		
9	1.12	2.09	0.440	3.79	0.218	2.43		
10	1.14	2.13	0.443	3.97	0.212	2.58		
12	1.14	2.18	0.450	4.27	0.203	2.92		
14	1.15	2.20	0.457	4.47	0.192	3.29		
16	1.15	2.22	0.465	4.58	0.181	3.69		
18	1.15	2.23	0.472	4.63	0.170	4.09		
20	1.15	2.25	0.478	4.64	0.160	4.47		
$\varphi = 90^\circ$								
$\varphi = 144^\circ$								

Table 50

 $M_\infty = 6, \gamma = 1.4, \theta_b = 10^\circ, \alpha = 5^\circ$ 

$z$	$p_b \cdot 10$	$\xi_b \cdot 10$	$p_b \cdot 10$	$\xi_b \cdot 10$	$p_b \cdot 10$	$\xi_b \cdot 10$		
$\varphi = 0^\circ$			$\varphi = 36^\circ$			$\varphi = 72^\circ$		
0.5	0.980	0	0.925	0.588	0.793	0.954		
1.0	0.892	0	0.842	0.627	0.722	1.02		
1.5	0.823	0	0.775	0.656	0.662	1.07		
2	0.774	0	0.725	0.679	0.616	1.11		
3	0.721	0	0.676	0.726	0.557	1.19		
4	0.707	0	0.651	0.775	0.529	1.27		
5	0.710	0	0.649	0.827	0.518	1.35		
6	0.724	0	0.657	0.880	0.515	1.43		
7	0.743	0	0.671	0.933	0.517	1.52		
8	0.764	0	0.687	0.985	0.522	1.60		
9	0.786	0	0.705	1.03	0.530	1.68		
10	0.807	0	0.722	1.07	0.538	1.76		
12	0.838	0	0.750	1.15	0.555	1.90		
14	0.864	0	0.774	1.20	0.571	2.02		
16	0.882	0	0.791	1.24	0.585	2.12		
18	0.895	0	0.804	1.26	0.596	2.19		
20	0.903	0	0.814	1.28	0.605	2.24		
22	0.907	0	0.821	1.29	0.611	2.27		
24	0.909	0	0.824	1.29	0.616	2.30		
$\varphi = 18^\circ$			$\varphi = 54^\circ$			$\varphi = 90^\circ$		
0.5	0.966	0.316	0.864	0.811	0.721	1.00		
1.0	0.879	0.329	0.786	0.867	0.657	1.08		
1.5	0.810	0.343	0.722	0.908	0.602	1.14		
2	0.761	0.355	0.674	0.941	0.558	1.19		
3	0.708	0.379	0.617	1.00	0.502	1.27		
4	0.692	0.406	0.593	1.07	0.469	1.35		
5	0.694	0.434	0.586	1.14	0.454	1.43		
6	0.706	0.462	0.589	1.21	0.447	1.52		
7	0.723	0.489	0.597	1.28	0.444	1.60		
8	0.744	0.516	0.608	1.35	0.445	1.69		
9	0.764	0.541	0.620	1.42	0.448	1.78		
10	0.784	0.564	0.633	1.49	0.452	1.87		
12	0.815	0.599	0.657	1.59	0.462	2.03		
14	0.840	0.624	0.678	1.68	0.472	2.18		
16	0.858	0.640	0.694	1.74	0.481	2.30		
18	0.871	0.652	0.706	1.79	0.493	2.41		
20	0.880	0.659	0.715	1.82	0.497	2.49		
22	0.885	0.662	0.723	1.84	0.504	2.55		
24	0.886	0.661	0.729	1.85	0.509	2.60		

Table 50 Concluded

 $M_{\infty} = 6, \gamma = 1.4, \theta_b = 10^\circ, \alpha = 5^\circ$ 

$z$	$p_b \cdot 10$	$\zeta_b \cdot 10$	$p_b \cdot 10$	$\zeta_b \cdot 10$	$p_b \cdot 10$	$\zeta_b \cdot 10$		
$\varphi = 108^\circ$			$\varphi = 144^\circ$			$\varphi = 180^\circ$		
0.5	0.655	0.957	0.560	0.594	0.528	0		
1.0	0.598	1.04	0.516	0.653	0.488	0		
1.5	0.549	1.10	0.476	0.696	0.453	0		
2	0.508	1.15	0.442	0.734	0.422	0		
3	0.452	1.23	0.393	0.788	0.377	0		
4	0.420	1.30	0.362	0.834	0.347	0		
5	0.401	1.38	0.342	0.877	0.328	0		
6	0.392	1.46	0.329	0.923	0.315	0		
7	0.387	1.54	0.323	0.973	0.307	0		
8	0.384	1.63	0.317	1.02	0.301	0		
9	0.383	1.71	0.314	1.07	0.298	0		
10	0.384	1.79	0.313	1.12	0.297	0		
12	0.389	1.96	0.313	1.23	0.297	0		
14	0.394	2.11	0.314	1.33	0.300	0		
16	0.399	2.26	0.316	1.44	0.303	0		
18	0.404	2.38	0.319	1.54	0.307	0		
20	0.409	2.50	0.321	1.65	0.310	0		
22	0.413	2.59	0.323	1.75	0.314	0		
24	0.417	2.67	0.324	1.85	0.317	0		
$\varphi = 126^\circ$			$\varphi = 162^\circ$					
0.5	0.600	0.818	0.536	0.311				
1.0	0.551	0.892	0.498	0.344				
1.5	0.506	0.949	0.456	0.370				
2	0.469	0.994	0.427	0.389				
3	0.417	1.06	0.381	0.419				
4	0.384	1.12	0.351	0.443				
5	0.364	1.19	0.331	0.465				
6	0.353	1.25	0.318	0.488				
7	0.346	1.32	0.311	0.512				
8	0.342	1.39	0.305	0.537				
9	0.340	1.47	0.302	0.564				
10	0.339	1.54	0.300	0.591				
12	0.340	1.68	0.301	0.646				
14	0.342	1.82	0.303	0.701				
16	0.345	1.96	0.305	0.756				
18	0.348	2.09	0.309	0.812				
20	0.350	2.22	0.312	0.868				
22	0.352	2.33	0.315	0.925				
24	0.354	2.44	0.317	0.982				

Table 51

$$M_\infty = 6, \gamma = 1.4, \theta_b = 5^\circ, \alpha = 5^\circ$$

$z$	$p_b \cdot 10$	$\xi_b \cdot 10$	$p_b \cdot 10$	$\xi_b \cdot 10$	$p_b \cdot 10$	$\xi_b \cdot 10$	$p_b \cdot 10$	$\xi_b \cdot 10$
$\varphi = 0^\circ$								
0.5	0.721	0	0.633	0.812	0.475	0.968	0.386	0.320
1.0	0.654	0	0.577	0.884	0.439	1.07	0.363	0.362
1.5	0.596	0	0.525	0.936	0.404	1.16	0.342	0.398
2	0.549	0	0.483	0.976	0.373	1.23	0.323	0.428
3	0.485	0	0.422	1.04	0.324	1.33	0.291	0.471
4	0.449	0	0.385	1.09	0.291	1.41	0.267	0.497
5	0.428	0	0.362	1.14	0.268	1.47	0.250	0.513
6	0.417	0	0.348	1.20	0.252	1.54	0.238	0.523
7	0.411	0	0.339	1.25	0.240	1.60	0.228	0.532
8	0.409	0	0.334	1.30	0.232	1.67	0.221	0.540
9	0.409	0	0.331	1.36	0.226	1.74	0.215	0.550
10	0.412	0	0.329	1.41	0.221	1.81	0.211	0.562
12	0.417	0	0.329	1.50	0.214	1.94	0.207	0.593
14	0.429	0	0.332	1.59	0.209	2.07	0.205	0.628
16	0.440	0	0.337	1.67	0.206	2.19	0.204	0.663
$\varphi = 18^\circ$								
			$\varphi = 72^\circ$		$\varphi = 126^\circ$		$\varphi = 180^\circ$	
0.5	0.710	0.309	0.580	0.959	0.434	0.828	0.380	0
1.0	0.644	0.333	0.529	1.05	0.404	0.928	0.358	0
1.5	0.587	0.350	0.483	1.11	0.375	1.01	0.338	0
2	0.541	0.364	0.443	1.17	0.348	1.07	0.320	0
3	0.477	0.386	0.386	1.25	0.305	1.17	0.290	0
4	0.440	0.406	0.349	1.32	0.275	1.24	0.268	0
5	0.419	0.426	0.325	1.38	0.254	1.29	0.252	0
6	0.408	0.446	0.310	1.45	0.238	1.35	0.239	0
7	0.402	0.466	0.300	1.51	0.227	1.39	0.230	0
8	0.399	0.485	0.294	1.58	0.219	1.45	0.222	0
9	0.399	0.504	0.289	1.64	0.213	1.50	0.217	0
10	0.401	0.522	0.286	1.70	0.209	1.56	0.212	0
12	0.406	0.555	0.282	1.81	0.202	1.67	0.208	0
14	0.416	0.585	0.281	1.93	0.198	1.78	0.206	0
16	0.426	0.612	0.283	2.03	0.194	1.89	0.206	0
$\varphi = 36^\circ$								
			$\varphi = 90^\circ$		$\varphi = 144^\circ$			
0.5	0.680	0.589	0.525	1.01	0.404	0.605		
1.0	0.617	0.637	0.482	1.11	0.378	0.683		
1.5	0.562	0.672	0.441	1.19	0.354	0.748		
2	0.517	0.699	0.405	1.26	0.331	0.800		
3	0.455	0.742	0.352	1.35	0.294	0.877		
4	0.417	0.781	0.316	1.43	0.268	0.928		
5	0.395	0.819	0.293	1.50	0.249	0.965		
6	0.383	0.858	0.277	1.57	0.235	0.994		
7	0.376	0.896	0.266	1.64	0.225	1.02		
8	0.372	0.933	0.258	1.71	0.217	1.05		
9	0.370	0.969	0.252	1.78	0.212	1.08		
10	0.371	1.00	0.248	1.84	0.208	1.11		
12	0.373	1.07	0.241	1.98	0.203	1.18		
14	0.381	1.13	0.238	2.10	0.201	1.25		
16	0.389	1.18	0.236	2.23	0.199	1.32		

Table 52

 $M_\infty = 4, \gamma = 1.4, \theta_b = 15^\circ, \alpha = 5^\circ$ 

z	$p_b \cdot 10$	$\zeta_b \cdot 10$	$p_b \cdot 10$	$\zeta_b \cdot 10$	$p_b \cdot 10$	$\zeta_b \cdot 10$
	$\varphi = 0^\circ$		$\varphi = 36^\circ$		$\varphi = 72^\circ$	
0.5	1.59	0	1.50	0.605	1.31	0.977
1.0	1.51	0	1.44	0.646	1.25	1.04
1.5	1.47	0	1.39	0.679	1.21	1.10
2	1.46	0	1.38	0.710	1.18	1.15
3	1.48	0	1.38	0.771	1.17	1.25
4	1.52	0	1.42	0.829	1.18	1.34
5	1.56	0	1.46	0.882	1.21	1.43
6	1.61	0	1.49	0.929	1.23	1.51
7	1.64	0	1.52	0.968	1.26	1.58
8	1.66	0	1.55	0.999	1.28	1.64
9	1.68	0	1.57	1.02	1.29	1.69
10	1.69	0	1.58	1.03	1.31	1.74
14	1.71	0	1.60	1.06	1.33	1.82
18	1.71	0	1.61	1.07	1.35	1.85
22	1.72	0	1.61	1.08	1.35	1.87
26	1.72	0	1.61	1.08	1.35	1.87
30	1.72	0	1.61	1.08	1.36	1.86
34	1.72	0	1.61	1.08	1.36	1.86
$\varphi = 18^\circ$		$\varphi = 54^\circ$		$\varphi = 90^\circ$		
0.5	1.56	0.318	1.42	0.833	1.21	1.02
1.0	1.49	0.339	1.35	0.890	1.15	1.10
1.5	1.45	0.356	1.31	0.937	1.10	1.16
2	1.44	0.373	1.29	0.980	1.08	1.22
3	1.45	0.405	1.28	1.06	1.06	1.32
4	1.49	0.435	1.31	1.14	1.06	1.42
5	1.54	0.464	1.34	1.21	1.08	1.51
6	1.58	0.486	1.37	1.28	1.10	1.60
7	1.61	0.507	1.40	1.34	1.12	1.68
8	1.63	0.522	1.42	1.38	1.13	1.74
9	1.65	0.533	1.44	1.42	1.15	1.81
10	1.66	0.541	1.45	1.45	1.16	1.86
14	1.68	0.554	1.48	1.50	1.19	1.99
18	1.69	0.559	1.49	1.52	1.20	2.04
20	1.69	0.561	1.49	1.52	1.21	2.07
26	1.69	0.561	1.49	1.52	1.21	2.08
30	1.69	0.562	1.49	1.52	1.22	2.08
34	1.69	0.563	1.50	1.52	1.22	2.08

Table 52 Concluded

$M_\infty = 4$ ,  $\gamma = 1.4$ ,  $\theta_B = 15^\circ$ ,  $\alpha = 5^\circ$

$z$	$p_b \cdot 10$	$\xi_b \cdot 10$	$p_b \cdot 10$	$\xi_b \cdot 10$	$p_b \cdot 10$	$\xi_b \cdot 10$
$\varphi = 108^\circ$						
0.5	1.11	0.972	0.954	0.598	0.913	0
1.0	1.05	1.05	0.922	0.655	0.875	0
1.5	1.01	1.11	0.885	0.698	0.842	0
2	0.987	1.17	0.859	0.735	0.817	0
3	0.963	1.26	0.832	0.798	0.792	0
4	0.963	1.36	0.825	0.855	0.784	0
5	0.972	1.45	0.829	0.910	0.786	0
6	0.986	1.53	0.836	0.960	0.793	0
7	1.00	1.61	0.847	1.01	0.801	0
8	1.01	1.68	0.857	1.05	0.811	0
9	1.02	1.74	0.865	1.10	0.820	0
10	1.03	1.80	0.874	1.14	0.829	0
14	1.05	1.95	0.899	1.27	0.859	0
18	1.07	2.05	0.912	1.38	0.870	0
22	1.08	2.10	0.920	1.47	0.876	0
26	1.09	2.13	0.926	1.54	0.881	0
30	1.09	2.14	0.928	1.59	0.884	0
34	1.09	2.15	0.928	1.63	0.888	0
$\varphi = 126^\circ$						
0.5	1.02	0.826	0.926	0.314		
1.0	0.979	0.900	0.887	0.345		
1.5	0.939	0.956	0.852	0.369		
2	0.912	1.00	0.827	0.388		
3	0.886	1.08	0.801	0.422		
4	0.881	1.16	0.794	0.452		
5	0.887	1.24	0.795	0.481		
6	0.897	1.31	0.803	0.508		
7	0.908	1.38	0.812	0.535		
8	0.919	1.44	0.822	0.561		
9	0.929	1.50	0.831	0.585		
10	0.937	1.55	0.840	0.607		
14	0.963	1.72	0.868	0.679		
18	0.978	1.84	0.879	0.736		
22	0.987	1.91	0.886	0.793		
26	0.990	1.96	0.891	0.854		
30	0.991	1.99	0.894	0.900		
34	0.993	2.02	0.897	0.945		

Table 53

 $M_{\infty} = 4, \gamma = 1.4, \theta_b = 10^\circ, \alpha = 5^\circ$ 

$z$	$p_b \cdot 10$	$\zeta_b \cdot 10$	$p_b \cdot 10$	$\zeta_b \cdot 10$	$p_b \cdot 10$	$\zeta_b \cdot 10$
	$\varphi = 0^\circ$		$\varphi = 36^\circ$		$\varphi = 72^\circ$	
0.5	1.20	0	1.14	0.597	0.994	0.969
1.0	1.14	0	1.08	0.642	0.942	1.05
1.5	1.09	0	1.03	0.676	0.896	1.11
2	1.05	0	1.00	0.706	0.863	1.16
3	1.02	0	0.964	0.756	0.823	1.25
4	1.02	0	0.958	0.805	0.809	1.33
5	1.03	0	0.964	0.850	0.806	1.41
6	1.05	0	0.976	0.892	0.810	1.48
7	1.06	0	0.989	0.930	0.817	1.54
8	1.08	0	1.00	0.964	0.825	1.60
10	1.10	0	1.02	1.01	0.837	1.70
12	1.12	0	1.04	1.05	0.850	1.78
14	1.14	0	1.05	1.08	0.860	1.84
18	1.14	0	1.06	1.11	0.871	1.92
22	1.16	0	1.07	1.13	0.882	1.96
26	1.16	0	1.08	1.14	0.889	1.99
30	1.17	0	1.09	1.15	0.893	2.00
34	1.17	0	1.09	1.15	0.896	2.01
38	1.17	0	1.09	1.16	0.899	2.02
	$\varphi = 18^\circ$		$\varphi = 54^\circ$		$\varphi = 90^\circ$	
0.5	1.19	0.314	1.07	0.823	0.909	1.01
1.0	1.12	0.337	1.01	0.889	0.864	1.11
1.5	1.07	0.354	0.969	0.938	0.822	1.18
2	1.04	0.369	0.936	0.979	0.790	1.24
3	1.01	0.395	0.898	1.05	0.750	1.34
4	1.00	0.420	0.888	1.11	0.732	1.42
5	1.01	0.444	0.889	1.18	0.726	1.50
6	1.03	0.465	0.893	1.24	0.726	1.58
7	1.04	0.485	0.908	1.29	0.730	1.65
8	1.06	0.502	0.919	1.34	0.735	1.72
10	1.08	0.528	0.935	1.41	0.745	1.84
12	1.10	0.547	0.951	1.47	0.754	1.93
14	1.11	0.561	0.963	1.52	0.761	2.00
18	1.12	0.575	0.975	1.57	0.771	2.10
22	1.13	0.584	0.986	1.60	0.781	2.17
26	1.14	0.591	0.992	1.62	0.787	2.22
30	1.15	0.594	0.998	1.63	0.793	2.24
34	1.15	0.596	1.00	1.64	0.796	2.25
38	1.15	0.597	1.00	1.64	0.797	2.26

Table 53 Concluded

 $M_\infty = 4, \gamma = 1.4, \theta_b = 10^\circ, \alpha = 5^\circ$ 

$z$	$p_b \cdot 10$	$\zeta_b \cdot 10$	$p_b \cdot 10$	$\zeta_b \cdot 10$	$p_b \cdot 10$	$\zeta_b \cdot 10$
$\varphi = 108^\circ$						
0.5	0.831	0.971	0.715	0.612	0.680	0
1.0	0.793	1.07	0.692	0.670	0.657	0
1.5	0.755	1.14	0.664	0.724	0.633	0
2	0.726	1.20	0.640	0.767	0.614	0
3	0.688	1.30	0.609	0.836	0.588	0
4	0.668	1.38	0.592	0.890	0.573	0
5	0.660	1.46	0.584	0.938	0.566	0
6	0.657	1.53	0.581	0.982	0.565	0
7	0.658	1.61	0.580	1.02	0.566	0
8	0.662	1.68	0.582	1.06	0.568	0
10	0.670	1.80	0.590	1.14	0.577	0
12	0.677	1.89	0.598	1.21	0.584	0
14	0.683	1.97	0.605	1.28	0.591	0
18	0.691	2.09	0.617	1.39	0.609	0
22	0.698	2.18	0.620	1.48	0.617	0
26	0.703	2.25	0.622	1.55	0.621	0
30	0.707	2.30	0.624	1.62	0.624	0
34	0.711	2.33	0.624	1.69	0.624	0
38	0.714	2.35	0.624	1.76	0.624	0
$\varphi = 126^\circ$						
0.5	0.767	0.827	0.690	0.335		
1.0	0.734	0.915	0.665	0.353		
1.5	0.702	0.984	0.641	0.384		
2	0.675	1.03	0.620	0.408		
3	0.640	1.12	0.593	0.445		
4	0.621	1.20	0.577	0.473		
5	0.612	1.27	0.570	0.498		
6	0.609	1.33	0.568	0.521		
7	0.608	1.39	0.569	0.541		
8	0.610	1.45	0.571	0.559		
10	0.619	1.56	0.579	0.596		
12	0.626	1.65	0.587	0.633		
14	0.631	1.74	0.594	0.672		
18	0.640	1.86	0.611	0.744		
22	0.644	1.95	0.616	0.796		
26	0.647	2.03	0.619	0.843		
30	0.650	2.10	0.621	0.889		
34	0.652	2.16	0.621	0.937		
38	0.653	2.20	0.621	0.989		

Table 54

$H = 30, V_\infty = 7500, \theta_b = 15^\circ, \alpha = 5^\circ$

$\varphi$	R	$\xi \cdot 10$								
$z = 1$		$z = 5$		$z = 9$		$z = 13$		$z = 18$		
0	1.598	3.18	2.507	2.55	3.734	2.94	4.902	2.89	6.358	2.92
18	1.604	3.21	2.615	2.53	3.737	2.94	4.908	2.90	6.364	2.92
36	1.619	3.31	2.642	2.46	3.746	2.94	4.923	2.92	6.381	2.92
54	1.645	3.48	2.694	2.39	3.759	2.90	4.940	2.95	6.407	2.93
72	1.677	3.70	2.775	2.40	3.796	2.73	4.952	2.96	6.428	2.94
90	1.715	3.95	2.879	2.49	3.876	2.61	4.975	2.87	6.438	2.94
108	1.754	4.21	3.000	2.63	4.010	2.50	5.053	2.69	6.456	2.88
126	1.791	4.45	3.121	2.79	4.176	2.54	5.198	2.59	6.532	2.74
144	1.822	4.64	3.226	2.95	4.333	2.64	5.371	2.57	6.676	2.65
162	1.842	4.77	3.296	3.06	4.443	2.72	5.507	2.61	6.813	2.62
180	1.849	4.82	3.321	3.10	4.482	2.76	5.557	2.63	6.868	2.62
$z = 2$		$z = 6$		$z = 10$		$z = 14$		$z = 20$		
0	1.879	2.56	2.872	2.71	4.028	2.93	5.192	2.90	6.944	2.93
18	1.887	2.58	2.878	2.69	4.031	2.93	5.198	2.90	6.951	2.93
36	1.911	2.64	2.898	2.64	4.041	2.95	5.214	2.91	6.968	2.93
54	1.950	2.75	2.939	2.54	4.053	2.95	5.235	2.94	6.994	2.94
72	2.003	2.92	3.016	2.43	4.075	2.84	5.248	2.96	7.016	2.93
90	2.065	3.14	3.127	2.44	4.141	2.67	5.264	2.90	7.028	2.95
108	2.129	3.38	3.259	2.55	4.264	2.55	5.325	2.74	7.036	2.91
126	2.190	3.61	3.395	2.69	4.429	2.53	5.459	2.62	7.088	2.80
144	2.241	3.81	3.515	2.83	4.595	2.60	5.629	2.58	7.211	2.59
162	2.274	3.94	3.596	2.94	4.714	2.68	5.768	2.60	7.341	2.65
180	2.285	3.98	3.625	2.98	4.756	2.71	5.821	2.62	7.396	2.64
$z = 3$		$z = 7$		$z = 11$		$z = 15$		$z = 22$		
0	2.126	2.39	3.149	2.85	4.321	2.92	5.483	2.90	7.529	2.92
18	2.135	2.40	3.154	2.83	4.325	2.92	5.489	2.90	7.536	2.92
36	2.163	2.44	3.169	2.77	4.336	2.94	5.505	2.91	7.555	2.93
54	2.211	2.50	3.201	2.67	4.348	2.96	5.528	2.93	7.583	2.94
72	2.277	2.51	3.255	2.55	4.363	2.91	5.544	2.95	7.605	2.94
90	2.358	2.77	3.371	2.45	4.412	2.74	5.556	2.92	7.619	2.94
108	2.445	2.97	3.512	2.50	4.522	2.60	5.602	2.79	7.619	2.92
126	2.529	3.19	3.661	2.62	4.684	2.54	5.723	2.65	7.652	2.83
144	2.599	3.38	3.794	2.75	4.855	2.58	5.898	2.60	7.754	2.73
162	2.645	3.51	3.886	2.85	4.981	2.65	6.029	2.60	7.875	2.68
180	2.661	3.55	3.918	2.88	5.026	2.68	6.082	2.61	7.927	2.67
$z = 4$		$z = 8$		$z = 12$		$z = 16$				
0	2.362	2.36	3.439	2.93	4.612	2.90	5.774	2.91		
18	2.372	2.36	3.443	2.92	4.617	2.91	5.779	2.91		
36	2.403	2.36	3.453	2.89	4.629	2.93	5.797	2.91		
54	2.455	2.39	3.475	2.79	4.645	2.95	5.822	2.92		
72	2.531	2.47	3.526	2.65	4.656	2.94	5.839	2.95		
90	2.625	2.59	3.619	2.52	4.689	2.81	5.849	2.94		
108	2.731	2.76	3.761	2.48	4.785	2.65	5.884	2.83		
126	2.835	2.94	3.921	2.57	4.939	2.56	5.990	2.68		
144	2.923	3.12	4.066	2.59	5.113	2.57	6.149	2.61		
162	2.981	3.24	4.167	2.78	5.245	2.63	6.289	2.61		
180	3.001	3.28	4.203	2.81	5.293	2.65	6.345	2.61		

Table 53

$H = 30, V_\infty = 7500, \theta_b = 5^\circ, \alpha = 5^\circ$

$\Phi$	R	$\xi \cdot 10$										
$z = 0.5$												
0	1.488	3.65	2.010	1.95	2.588	1.12	2.978	0.854	3.554	0.632	4.048	0.638
18	1.492	3.69	2.021	1.99	2.612	1.15	3.011	0.876	3.602	0.644	4.097	0.630
36	1.504	3.80	2.055	2.09	2.683	1.23	3.112	0.944	3.748	0.686	4.261	0.620
54	1.524	3.96	2.108	2.26	2.798	1.37	3.278	1.06	3.999	0.778	4.566	0.659
72	1.549	4.18	2.178	2.48	2.952	1.57	3.507	1.24	4.356	0.926	5.029	0.770
90	1.579	4.43	2.259	2.74	3.134	1.81	3.783	1.46	4.808	1.13	5.641	0.960
108	1.610	4.68	2.343	3.01	3.327	2.09	4.083	1.73	5.316	1.39	6.352	1.21
126	1.639	4.92	2.422	3.27	3.511	2.35	4.374	2.00	5.822	1.66	7.078	1.48
144	1.663	5.11	2.487	3.48	3.663	2.58	4.617	2.23	6.254	1.90	7.707	1.74
162	1.679	5.24	2.520	3.61	3.754	2.73	4.789	2.38	6.545	2.07	8.134	1.91
180	1.685	5.28	2.545	3.56	3.799	2.78	4.836	2.44	6.647	2.13	8.285	1.97
$z = 1$												
$z = 3.5$												
0	1.652	2.95	2.187	1.61	2.696	1.04	3.140	0.770	3.678	0.614		
18	1.655	3.00	2.202	1.65	2.723	1.06	3.178	0.790	3.728	0.622		
36	1.675	3.11	2.246	1.75	2.802	1.14	3.291	0.854	3.882	0.656		
54	1.704	3.28	2.316	1.91	2.930	1.27	3.481	0.957	4.151	0.737		
72	1.740	3.50	2.408	2.13	3.104	1.46	3.744	1.13	4.537	0.878		
90	1.782	3.76	2.514	2.38	3.310	1.70	4.065	1.35	5.029	1.08		
108	1.826	4.02	2.625	2.66	3.530	1.97	4.418	1.61	5.588	1.33		
126	1.868	4.27	2.730	2.92	3.741	2.24	4.763	1.88	6.149	1.61		
144	1.902	4.47	2.816	3.13	3.916	2.46	5.052	2.12	6.630	1.85		
162	1.924	4.60	2.873	3.27	4.031	2.62	5.245	2.28	6.954	2.02		
180	1.932	4.64	2.893	3.32	4.072	2.67	5.313	2.33	7.069	2.08		
$z = 1.5$												
$z = 4.5$												
$z = 8.5$												
$z = 14.5$												
$z = 22.5$												
0	1.789	2.52	2.337	1.39	2.797	0.967	3.288	0.708	3.800	0.508		
18	1.797	2.55	2.355	1.43	2.825	0.991	3.329	0.726	3.851	0.612		
36	1.819	2.65	2.409	1.52	2.912	1.06	3.455	0.783	4.011	0.635		
54	1.856	2.83	2.495	1.67	3.054	1.19	3.667	0.890	4.294	0.704		
72	1.904	3.06	2.608	1.88	3.245	1.37	3.962	1.05	4.708	0.836		
90	1.958	3.31	2.740	2.14	3.476	1.61	4.328	1.27	5.242	1.05		
108	2.016	3.58	2.877	2.41	3.723	1.88	4.732	1.52	5.852	1.29		
126	2.070	3.93	3.010	2.58	3.960	2.14	5.131	1.73	6.467	1.56		
144	2.114	4.03	3.118	2.89	4.157	2.37	5.467	2.03	6.997	1.81		
162	2.143	4.15	3.189	3.04	4.288	2.52	5.593	2.19	7.355	1.98		
180	2.153	4.21	3.214	3.09	4.334	2.58	5.772	2.25	7.482	2.04		
$z = 2$												
$z = 5.5$												
$z = 9.5$												
$z = 16.5$												
$z = 24.5$												
0	1.906	2.19	2.469	1.24	2.890	0.906	3.425	0.662	3.923	0.616		
18	1.916	2.23	2.491	1.27	2.921	0.929	3.469	0.678	3.974	0.613		
36	1.944	2.33	2.553	1.36	3.015	1.00	3.506	0.729	4.136	0.623		
54	1.939	2.50	2.654	1.50	3.169	1.12	3.839	0.828	4.432	0.673		
72	2.048	2.73	2.788	1.71	3.380	1.30	4.166	0.983	4.872	0.801		
90	2.116	2.98	2.945	1.96	3.633	1.53	4.575	1.19	5.445	0.997		
108	2.186	3.25	3.111	2.23	3.907	1.80	5.031	1.45	6.106	1.25		
126	2.253	3.51	3.269	2.49	4.171	2.06	5.483	1.72	6.776	1.52		
144	2.307	3.71	3.398	2.72	4.394	2.29	5.867	1.96	7.355	1.77		
162	2.343	3.85	3.484	2.86	4.537	2.45	6.125	2.12	7.748	1.94		
180	2.355	3.90	3.514	2.91	4.589	2.50	6.216	2.18	7.887	2.00		

Table 56

 $H = 30, V_\infty = 5000, \theta_b = 15^\circ, \alpha = 5^\circ$ 

$\Psi$	R	$\xi \cdot 10$								
$z = 1$		$z = 5$		$z = 9$		$z = 13$		$z = 18$		
0	1.662	3.46	2.709	2.51	3.819	2.97	5.020	2.99	6.515	2.99
18	1.667	3.50	2.719	2.50	3.822	2.95	5.022	3.00	6.518	2.99
36	1.684	3.60	2.751	2.49	3.833	2.91	5.029	3.00	6.527	2.99
54	1.709	3.76	2.807	2.49	3.859	2.83	5.039	3.01	6.540	2.99
72	1.743	3.97	2.889	2.53	3.914	2.70	5.055	2.96	6.554	3.00
90	1.782	4.21	2.997	2.59	4.020	2.56	5.103	2.82	6.568	2.98
108	1.824	4.47	3.126	2.71	4.176	2.57	5.216	2.68	6.610	2.87
126	1.863	4.72	3.256	2.89	4.354	2.65	5.401	2.60	6.735	2.74
144	1.896	4.92	3.371	3.06	4.522	2.76	5.604	2.65	6.925	2.65
162	1.918	5.06	3.449	3.20	4.644	2.85	5.757	2.72	7.100	2.65
180	1.925	5.11	3.477	3.24	4.688	2.88	5.814	2.75	7.169	2.67
$z = 2$		$z = 6$		$z = 10$		$z = 14$		$z = 20$		
0	1.960	2.65	2.967	2.65	4.118	3.00	5.320	2.99	7.115	2.99
18	1.969	2.67	2.975	2.62	4.120	3.00	5.322	2.99	7.117	2.99
36	1.994	2.75	3.003	2.56	4.128	2.97	5.329	3.00	7.126	2.99
54	2.035	2.88	3.057	2.51	4.146	2.90	5.340	3.00	7.139	2.99
72	2.089	3.07	3.142	2.51	4.190	2.79	5.353	2.99	7.155	3.00
90	2.152	3.30	3.256	2.56	4.280	2.63	5.389	2.87	7.167	2.99
108	2.220	3.56	3.394	2.65	4.433	2.56	5.487	2.73	7.191	2.93
126	2.284	3.81	3.540	2.79	4.618	2.63	5.662	2.61	7.289	2.79
144	2.339	4.03	3.671	2.94	4.797	2.73	5.869	2.64	7.460	2.70
162	2.374	4.17	3.762	3.06	4.927	2.81	6.029	2.70	7.631	2.66
180	2.387	4.22	3.794	3.10	4.974	2.84	6.088	2.73	7.703	2.66
$z = 3$		$z = 7$		$z = 11$		$z = 15$		$z = 22$		
0	2.213	2.47	3.240	2.80	4.419	3.01	5.619	2.98	7.714	2.99
18	2.223	2.47	3.246	2.78	4.421	3.01	5.622	2.99	7.717	2.99
36	2.254	2.50	3.267	2.71	4.427	3.00	5.629	2.99	7.725	2.99
54	2.304	2.56	3.312	2.60	4.439	2.96	5.640	3.00	7.739	2.99
72	2.374	2.68	3.393	2.52	4.472	2.85	5.653	3.00	7.755	3.00
90	2.459	2.87	3.511	2.54	4.548	2.71	5.679	2.92	7.767	2.99
108	2.552	3.10	3.658	2.61	4.690	2.58	5.763	2.77	7.781	2.96
126	2.640	3.34	3.816	2.73	4.880	2.61	5.925	2.64	7.852	2.83
144	2.716	3.55	3.961	2.85	5.069	2.70	6.133	2.63	8.006	2.74
162	2.766	3.69	4.063	2.96	5.206	2.78	6.299	2.68	8.167	2.69
180	2.783	3.74	4.100	3.00	5.257	2.81	6.361	2.71	8.237	2.68
$z = 4$		$z = 8$		$z = 12$		$z = 16$		$z = 24$		
0	2.460	2.47	3.525	2.89	4.720	3.00	5.918	2.98	8.313	2.99
18	2.471	2.47	3.529	2.88	4.722	3.00	5.921	2.98	8.316	2.99
36	2.502	2.48	3.545	2.83	4.728	3.01	5.929	2.99	8.325	2.99
54	2.557	2.50	3.580	2.73	4.738	2.99	5.941	3.00	8.338	2.99
72	2.635	2.56	3.649	2.59	4.761	2.91	5.953	3.00	8.355	2.99
90	2.735	2.67	3.765	2.53	4.823	2.78	5.972	2.95	8.367	3.00
108	2.848	2.84	3.918	2.59	4.951	2.62	6.042	2.80	8.376	2.98
126	2.959	3.06	4.087	2.69	5.141	2.59	6.191	2.68	8.423	2.87
144	3.055	3.25	4.244	2.80	5.338	2.67	6.396	2.63	8.559	2.78
162	3.120	3.39	4.356	2.89	5.483	2.75	6.567	2.67	8.709	2.73
180	3.142	3.44	4.397	2.93	5.537	2.78	6.632	2.69	8.776	2.71

Table 57

 $H = 30, V_\infty = 5000, \theta_B = 10^\circ, \alpha = 5^\circ$ 

$\varphi$	R	$\xi \cdot 10$						
<b><math>z = 1</math></b>								
0	1.691	3.35	2.568	1.69	3.209	1.54	4.394	1.89
18	1.697	3.38	2.585	1.71	3.231	1.54	4.405	1.87
36	1.714	3.48	2.635	1.76	3.297	1.57	4.445	1.80
54	1.741	3.64	2.720	1.87	3.411	1.63	4.540	1.71
72	1.776	3.85	2.834	2.03	3.574	1.73	4.724	1.62
90	1.818	4.10	2.972	2.25	3.784	1.88	5.014	1.66
108	1.862	4.36	3.122	2.50	4.023	2.07	5.375	1.82
126	1.903	4.61	3.267	2.76	4.266	2.30	5.762	2.01
144	1.938	4.82	3.389	2.98	4.475	2.51	6.111	2.20
162	1.961	4.96	3.471	3.13	4.618	2.66	6.357	2.35
180	1.969	5.01	3.500	3.19	4.669	2.72	6.445	2.40
<b><math>z = 2</math></b>								
0	1.978	2.48	2.734	1.63	3.363	1.54	4.783	1.98
18	1.987	2.51	2.753	1.65	3.385	1.54	4.790	1.96
36	2.013	2.61	2.808	1.69	3.453	1.55	4.817	1.90
54	2.057	2.77	2.902	1.77	3.573	1.60	4.891	1.79
72	2.113	2.98	3.031	1.91	3.746	1.69	5.054	1.68
90	2.180	3.23	3.190	2.10	3.969	1.83	5.346	1.65
108	2.250	3.50	3.364	2.34	4.228	2.02	5.736	1.78
126	2.317	3.76	3.535	2.60	4.493	2.24	6.161	1.97
144	2.373	3.97	3.679	2.82	4.723	2.45	6.548	2.16
162	2.410	4.12	3.776	2.97	4.881	2.59	6.822	2.30
180	2.423	4.17	3.811	3.03	4.938	2.65	6.921	2.35
<b><math>z = 3</math></b>								
0	2.202	2.04	2.896	1.59	3.682	1.65	5.184	2.02
18	2.214	2.07	2.916	1.61	3.701	1.63	5.189	2.01
36	2.250	2.16	2.975	1.64	3.766	1.58	5.207	1.98
54	2.309	2.31	3.076	1.71	3.890	1.57	5.259	1.88
72	2.386	2.51	3.218	1.83	4.079	1.63	5.397	1.74
90	2.478	2.75	3.396	2.00	4.329	1.76	5.677	1.66
108	2.575	3.02	3.593	2.23	4.624	1.94	6.088	1.74
126	2.668	3.28	3.789	2.47	4.931	2.14	6.551	1.93
144	2.746	3.50	3.955	2.69	5.202	2.34	6.976	2.11
162	2.797	3.65	4.068	2.85	5.390	2.49	7.278	2.26
180	2.816	3.71	4.107	2.90	5.457	2.54	7.387	2.31
<b><math>z = 4</math></b>								
0	2.393	1.81	3.054	1.56	4.026	1.78	5.589	2.03
18	2.408	1.83	3.075	1.57	4.042	1.76	5.594	2.03
36	2.452	1.90	3.137	1.60	4.094	1.70	5.608	2.02
54	2.525	2.03	3.246	1.67	4.207	1.61	5.643	1.95
72	2.622	2.22	3.398	1.77	4.402	1.60	5.753	1.80
90	2.738	2.45	3.593	1.93	4.677	1.70	6.012	1.69
108	2.861	2.71	3.812	2.14	5.005	1.87	6.436	1.72
126	2.981	2.98	4.032	2.38	5.353	2.07	6.934	1.89
144	3.080	3.20	4.219	2.59	5.664	2.26	7.396	2.08
162	3.147	3.35	4.347	2.75	5.881	2.41	7.727	2.22
180	3.171	3.40	4.393	2.80	5.958	2.46	7.846	2.27

Table 58

$H = 30$ ,  $V_\infty = 5000$ ,  $\theta_B = 5^\circ$ ,  $\alpha = 5^\circ$

$\varphi$	R	$\xi \cdot 10$	R	$\xi \cdot 10$	R	$\xi \cdot 10$	R	$\xi \cdot 10$
<b>Z = 1</b>								
			<b>Z = 8</b>			<b>Z = 16</b>		
0	1.720	3.24	2.935	1.13	3.687	0.803	4.802	0.733
18	1.726	3.28	2.962	1.15	3.730	0.822	4.856	0.712
36	1.744	3.38	3.049	1.22	3.862	0.880	5.040	0.682
54	1.772	3.54	3.176	1.35	4.085	0.982	5.394	0.712
72	1.810	3.75	3.357	1.54	4.398	1.13	5.933	0.828
90	1.853	4.00	3.575	1.78	4.793	1.34	6.648	1.02
108	1.899	4.26	3.811	2.05	5.238	1.59	7.492	1.27
126	1.943	4.51	4.042	2.32	5.686	1.86	8.376	1.54
144	1.979	4.72	4.236	2.56	6.073	2.11	9.162	1.80
162	2.004	4.86	4.368	2.72	6.338	2.28	9.709	1.98
180	2.012	4.91	4.414	2.77	6.432	2.34	9.904	2.05
			<b>Z = 2</b>			<b>Z = 10</b>		
			<b>Z = 20</b>			<b>Z = 36</b>		
0	1.999	2.41	3.148	1.01	3.989	0.713	5.120	0.863
18	2.008	2.45	3.180	1.03	4.039	0.730	5.162	0.826
36	2.036	2.55	3.277	1.10	4.194	0.783	5.323	0.738
54	2.080	2.71	3.433	1.21	4.457	0.882	5.677	0.706
72	2.139	2.93	3.650	1.39	4.831	1.03	6.256	0.790
90	2.208	3.18	3.914	1.62	5.307	1.23	7.047	0.973
108	2.281	3.45	4.204	1.88	5.852	1.48	7.991	1.22
126	2.350	3.71	4.489	2.15	6.409	1.75	8.986	1.50
144	2.408	3.92	4.731	2.39	6.894	1.99	9.875	1.76
162	2.446	4.07	4.895	2.56	7.227	2.17	10.49	1.94
180	2.460	4.12	4.953	2.62	7.346	2.23	10.71	2.01
			<b>Z = 4</b>			<b>Z = 12</b>		
			<b>Z = 24</b>			<b>Z = 40</b>		
0	2.396	1.66	3.342	0.927	4.262	0.661	5.489	0.975
18	2.412	1.59	3.377	0.947	4.318	0.672	5.518	0.949
36	2.460	1.79	3.486	1.00	4.493	0.714	5.638	0.841
54	2.536	1.94	3.666	1.12	4.793	0.803	5.963	0.731
72	2.637	2.15	3.917	1.28	5.226	0.948	6.567	0.766
90	2.757	2.40	4.226	1.50	5.783	1.14	7.428	0.933
108	2.884	2.68	4.568	1.76	6.427	1.39	8.472	1.18
126	3.006	2.95	4.908	2.03	7.092	1.66	9.579	1.46
144	3.108	3.17	5.198	2.27	7.576	1.91	10.57	1.72
162	3.177	3.33	5.395	2.44	8.080	2.09	11.26	1.91
180	3.201	3.38	5.465	2.50	8.223	2.15	11.51	1.98
			<b>Z = 6</b>			<b>Z = 14</b>		
			<b>Z = 28</b>			<b>Z = 44</b>		
0	2.691	1.32	3.520	0.660	4.525	0.661	5.894	1.04
18	2.713	1.34	3.560	0.679	4.533	0.660	5.915	1.02
36	2.779	1.43	3.680	0.939	4.770	0.677	5.997	0.950
54	2.884	1.57	3.882	1.04	5.103	0.746	6.266	0.788
72	3.027	1.77	4.165	1.20	5.591	0.881	5.871	0.757
90	3.196	2.02	4.517	1.41	6.228	1.08	7.795	0.900
108	3.378	2.29	4.911	1.67	6.972	1.32	8.938	1.14
126	3.555	2.56	5.306	1.94	7.746	1.60	10.15	1.43
144	3.702	2.79	5.644	2.18	8.430	1.85	11.25	1.69
162	3.802	2.95	5.875	2.35	8.905	2.03	12.02	1.88
180	3.837	3.01	5.956	2.41	9.074	2.09	12.30	1.95

Table 59

 $M_\infty = \infty, Y = 1.4, \theta_b = 15^\circ, \alpha = 5^\circ$ 

$\varphi$	R	$\xi \cdot 10$	R	$\xi \cdot 10$	R	$\xi \cdot 10$	R	$\xi \cdot 10$
$z = 0.5$								
0	1.603	4.74	2.254	2.47	3.305	2.48	4.712	3.01
18	1.608	4.76	2.264	2.49	3.316	2.46	4.712	3.00
36	1.620	4.85	2.297	2.57	3.352	2.40	4.715	2.97
54	1.640	4.99	2.348	2.71	3.419	2.36	4.728	2.87
72	1.667	5.18	2.416	2.91	3.522	2.35	4.769	2.72
90	1.697	5.40	2.495	3.15	3.659	2.38	4.870	2.52
108	1.729	5.63	2.578	3.41	3.825	2.46	5.041	2.44
126	1.760	5.84	2.656	3.65	3.995	2.60	5.251	2.46
144	1.785	6.02	2.720	3.85	4.145	2.76	5.454	2.53
162	1.801	6.14	2.761	3.98	4.245	2.88	5.599	2.60
180	1.807	6.18	2.776	4.03	4.280	2.92	5.653	2.63
$z = 1$								
			$z = 3$			$z = 8$		
0	1.812	3.69	2.374	2.33	3.562	2.64	5.315	3.00
18	1.817	3.72	2.385	2.35	3.570	2.62	5.315	3.01
36	1.835	3.83	2.421	2.41	3.599	2.54	5.317	3.01
54	1.863	3.99	2.479	2.52	3.659	2.43	5.317	2.99
72	1.899	4.20	2.556	2.70	3.758	2.37	5.330	2.87
90	1.941	4.45	2.647	2.92	3.897	2.38	5.390	2.68
108	1.986	4.70	2.743	3.17	4.070	2.44	5.535	2.50
126	2.027	4.93	2.832	3.41	4.253	2.54	5.744	2.46
144	2.061	5.12	2.906	3.62	4.417	2.68	5.959	2.50
162	2.084	5.24	2.955	3.75	4.528	2.78	6.116	2.56
180	2.092	5.29	2.972	3.80	4.568	2.83	6.175	2.58
$z = 1.5$								
			$z = 5$			$z = 9$		
0	1.980	3.09	2.831	2.30	3.834	2.78	5.914	2.98
18	1.988	3.13	2.844	2.30	3.840	2.76	5.915	2.98
36	2.010	3.23	2.884	2.30	3.861	2.68	5.918	2.99
54	2.046	3.39	2.952	2.31	3.908	2.55	5.919	3.00
72	2.094	3.61	3.052	2.35	3.998	2.43	5.916	2.97
90	2.148	3.86	3.177	2.46	4.136	2.39	5.941	2.81
108	2.205	4.12	3.317	2.64	4.313	2.42	6.044	2.60
126	2.258	4.35	3.452	2.85	4.506	2.51	6.238	2.48
144	2.303	4.55	3.567	3.04	4.682	2.62	6.459	2.49
162	2.331	4.68	3.641	3.18	4.803	2.72	6.626	2.53
180	2.341	4.72	3.668	3.22	4.847	2.75	6.689	2.55
$z = 2$								
			$z = 6$			$z = 10$		
0	2.125	2.71	3.064	2.35	4.118	2.89		
18	2.134	2.74	3.076	2.34	4.122	2.87		
36	2.162	2.84	3.116	2.33	4.136	2.80		
54	2.206	2.99	3.185	2.33	4.170	2.68		
72	2.264	3.20	3.287	2.34	4.245	2.51		
90	2.331	3.45	3.420	2.40	4.377	2.41		
108	2.401	3.71	3.575	2.52	4.556	2.42		
126	2.466	3.95	3.730	2.70	4.756	2.49		
144	2.520	4.15	3.863	2.88	4.942	2.58		
162	2.555	4.28	3.950	3.00	5.073	2.67		
180	2.567	4.33	3.981	3.05	5.120	2.70		

Table 60

 $M_{\infty} = \infty, \gamma = 1.4, \theta_b = 10^\circ, \alpha = 5^\circ$ 

$\varphi$	R	$\xi \cdot 10$										
<b><math>z = 0.5</math></b>												
0	1.642	4.47	2.375	2.08	3.033	1.43	3.733	1.41	5.078	2.04	6.729	1.95
18	1.647	4.54	2.388	2.11	3.056	1.44	3.759	1.40	5.080	1.91	6.676	1.98
36	1.661	4.60	2.428	2.21	3.125	1.49	3.839	1.40	5.104	1.82	6.674	1.99
54	1.682	4.75	2.491	2.38	3.242	1.58	3.983	1.42	5.183	1.67	6.672	1.98
72	1.710	4.95	2.574	2.60	3.401	1.73	4.194	1.50	5.372	1.51	6.712	1.82
90	1.743	5.19	2.670	2.85	3.593	1.94	4.468	1.62	5.703	1.49	6.933	1.61
108	1.777	5.43	2.769	3.12	3.798	2.20	4.785	1.81	6.139	1.51	7.396	1.55
126	1.809	5.65	2.862	3.37	3.995	2.46	5.102	2.03	6.614	1.78	7.990	1.66
144	1.836	5.83	2.939	3.58	4.157	2.67	5.373	2.24	7.041	1.96	8.557	1.83
162	1.854	5.95	2.989	3.72	4.265	2.82	5.554	2.39	7.336	2.10	8.961	1.96
180	1.860	5.99	3.006	3.77	4.302	2.87	5.617	2.45	7.441	2.15	9.107	2.02
<b><math>z = 1</math></b>												
0	1.841	3.55	2.567	1.77	3.175	1.41	4.026	1.52	5.510	2.22		
18	1.847	3.59	2.583	1.80	3.200	1.42	4.048	1.50	5.473	2.01		
36	1.866	3.69	2.632	1.89	3.272	1.45	4.123	1.44	5.480	1.93		
54	1.896	3.86	2.712	2.04	3.397	1.52	4.268	1.42	5.529	1.77		
72	1.934	4.08	2.816	2.25	3.570	1.65	4.490	1.46	5.683	1.59		
90	1.972	4.33	2.937	2.50	3.782	1.84	4.783	1.57	6.003	1.50		
108	2.026	4.58	3.063	2.77	4.012	2.03	5.139	1.74	6.458	1.58		
126	2.070	4.82	3.182	3.03	4.234	2.33	5.500	1.94	6.967	1.74		
144	2.106	5.01	3.280	3.25	4.419	2.55	5.812	2.14	7.430	1.92		
162	2.129	5.14	3.344	3.39	4.541	2.70	6.022	2.29	7.753	2.06		
180	2.138	5.18	3.366	3.44	4.584	2.75	6.098	2.34	7.863	2.11		
<b><math>z = 1.5</math></b>												
0	2.003	2.99	2.734	1.58	3.315	1.39	4.348	1.68	5.942	2.00		
18	2.012	3.02	2.753	1.61	3.341	1.40	4.364	1.65	5.879	2.02		
36	2.036	3.13	2.811	1.69	3.415	1.42	4.424	1.56	5.873	1.99		
54	2.074	3.30	2.905	1.82	3.548	1.48	4.556	1.46	5.894	1.87		
72	2.124	3.52	3.029	2.02	3.732	1.59	4.792	1.45	6.010	1.68		
90	2.181	3.77	3.175	2.26	3.962	1.76	5.098	1.53	6.306	1.52		
108	2.241	4.03	3.328	2.53	4.216	1.99	5.481	1.68	6.773	1.56		
126	2.296	4.28	3.473	2.79	4.463	2.24	5.882	1.87	7.313	1.71		
144	2.342	4.48	3.592	3.00	4.669	2.45	6.233	2.07	7.812	1.89		
162	2.373	4.61	3.670	3.15	4.806	2.60	6.473	2.21	8.162	2.02		
180	2.383	4.65	3.697	3.20	4.854	2.65	6.557	2.26	8.288	2.07		
<b><math>z = 2</math></b>												
0	2.133	2.59	2.887	1.48	3.454	1.38	4.698	1.81	6.336	1.96		
18	2.153	2.63	2.909	1.50	3.489	1.39	4.710	1.78	6.279	1.98		
36	2.182	2.73	2.973	1.56	3.558	1.41	4.752	1.70	6.274	2.00		
54	2.229	2.91	3.080	1.67	3.695	1.46	4.859	1.56	6.277	1.95		
72	2.290	3.13	3.222	1.85	3.889	1.55	5.074	1.46	6.354	1.75		
90	2.360	3.38	3.392	2.08	4.136	1.70	5.403	1.51	6.615	1.56		
108	2.432	3.65	3.571	2.34	4.412	1.92	5.814	1.64	7.086	1.55		
126	2.500	3.89	3.742	2.60	4.683	2.16	6.253	1.82	7.654	1.69		
144	2.556	4.10	3.883	2.82	4.911	2.37	6.642	2.01	8.187	1.86		
162	2.593	4.23	3.976	2.96	5.063	2.52	6.910	2.15	8.565	1.99		
180	2.606	4.27	4.008	3.01	5.116	2.57	7.003	2.20	8.700	2.04		

Table 61

 $M_\infty = 6, \gamma = 1.4, \theta_b = 10^\circ, \alpha = 10^\circ$ 

$\varphi$	R	$\xi \cdot 10$								
$z = 0.5$		$z = 3$		$z = 7$		$z = 12$		$z = 20$		
0	1.628	4.16	2.316	2.02	3.061	1.85	4.087	2.21	5.910	2.30
18	1.637	4.22	2.338	2.07	3.094	1.86	4.111	2.20	5.939	2.30
36	1.662	4.40	2.405	2.21	3.188	1.88	4.191	2.18	6.031	2.34
54	1.704	4.69	2.518	2.46	3.362	1.96	4.356	2.09	6.191	2.38
72	1.761	5.09	2.675	2.84	3.633	2.14	4.674	2.07	6.454	2.38
90	1.830	5.57	2.868	3.34	4.002	2.51	5.178	2.26	6.982	2.30
108	1.907	6.10	3.085	3.90	4.441	3.04	5.854	2.67	7.903	2.49
126	1.985	6.63	3.304	4.49	4.899	3.64	6.607	3.24	9.081	2.98
144	2.054	7.09	3.496	5.01	5.307	4.19	7.296	3.81	10.22	3.54
162	2.101	7.41	3.630	5.37	5.592	4.58	7.783	4.22	11.04	3.97
180	2.117	7.53	3.677	5.50	5.695	4.73	7.959	4.37	11.34	4.12
$z = 1$		$z = 4$		$z = 8$		$z = 14$				
0	1.814	3.31	2.509	1.87	3.252	1.91	4.537	2.27		
18	1.825	3.37	2.536	1.90	3.282	1.90	4.561	2.27		
36	1.859	3.55	2.614	1.99	3.377	1.90	4.638	2.27		
54	1.915	3.85	2.750	2.19	3.557	1.95	4.791	2.23		
72	1.992	4.25	2.943	2.54	3.845	2.10	5.094	2.13		
90	2.086	4.75	3.185	3.01	4.248	2.42	5.627	2.23		
108	2.191	5.29	3.458	3.58	4.740	2.93	6.381	2.59		
126	2.296	5.84	3.736	4.17	5.258	3.53	7.246	3.15		
144	2.387	6.33	3.981	4.70	5.722	4.09	8.050	3.72		
162	2.451	6.66	4.151	5.07	6.046	4.48	8.619	4.14		
180	2.474	6.78	4.213	5.21	6.163	4.63	8.825	4.29		
$z = 1.5$		$z = 5$		$z = 9$		$z = 16$				
0	1.965	2.78	2.695	1.84	3.448	2.01	4.994	2.28		
18	1.980	2.84	2.723	1.85	3.476	1.99	5.020	2.29		
36	2.023	3.02	2.809	1.91	3.569	1.94	5.097	2.31		
54	2.094	3.31	2.962	2.05	3.753	1.95	5.246	2.31		
72	2.191	3.72	3.187	2.34	4.054	2.07	5.529	2.22		
90	2.310	4.22	3.474	2.79	4.487	2.36	6.075	2.24		
108	2.442	4.77	3.804	3.35	5.029	2.84	6.895	2.54		
126	2.575	5.34	4.142	3.94	5.606	3.44	7.870	3.08		
144	2.691	5.83	4.441	4.48	6.126	4.00	8.787	3.65		
162	2.771	6.17	4.648	4.86	6.491	4.40	9.441	4.07		
180	2.800	6.30	4.723	5.00	5.622	4.55	9.677	4.22		
$z = 2$		$z = 6$		$z = 10$		$z = 18$				
0	2.095	2.43	2.879	1.84	3.654	2.10	5.451	2.28		
18	2.113	2.48	2.908	1.85	3.680	2.08	5.479	2.29		
36	2.164	2.65	2.999	1.89	3.768	2.02	5.563	2.33		
54	2.250	2.94	3.164	1.98	3.950	1.98	5.715	2.36		
72	2.367	3.34	3.415	2.21	4.261	2.06	5.984	2.31		
90	2.511	3.84	3.745	2.62	4.721	2.31	6.525	2.26		
108	2.671	4.40	4.131	3.17	5.310	2.77	7.402	2.51		
126	2.832	4.97	4.528	3.77	5.947	3.36	8.480	3.02		
144	2.973	5.48	4.881	4.32	6.523	3.93	9.511	3.59		
162	3.071	5.83	5.127	4.71	6.927	4.33	10.24	4.01		
180	3.106	5.96	5.216	4.85	7.073	4.48	10.52	4.17		

Table 62

 $M_{\infty} = 6, \gamma = 1.4, \theta_b = 5^\circ, \alpha = 5^\circ$ 

$\varphi$	R	$\xi \cdot 10$								
$z = 0.5$		$z = 3$		$z = 7$		$z = 12$		$z = 20$		
0	1.723	4.90	2.604	2.76	3.541	2.09	4.547	1.97	6.213	2.24
18	1.738	4.93	2.618	2.79	3.566	2.11	4.580	1.98	6.243	2.23
36	1.743	5.03	2.658	2.89	3.642	2.19	4.683	2.02	6.339	2.19
54	1.766	5.20	2.724	3.06	3.769	2.32	4.862	2.10	6.532	2.13
72	1.797	5.41	2.809	3.28	3.938	2.51	5.113	2.23	6.852	2.15
90	1.833	5.65	2.910	3.54	4.141	2.76	5.428	2.43	7.298	2.27
108	1.871	5.92	3.017	3.82	4.389	3.03	5.779	2.69	7.833	2.47
126	1.907	6.17	3.119	4.09	4.570	3.31	6.125	2.96	8.385	2.72
144	1.937	6.38	3.204	4.32	4.747	3.54	6.420	3.19	8.866	2.95
162	1.957	6.52	3.260	4.47	4.865	3.70	6.618	3.35	9.194	3.11
180	1.964	6.56	3.280	4.52	4.907	3.76	6.688	3.41	9.311	3.17
$z = 1$		$z = 4$		$z = 8$		$z = 14$		$z = 22$		
0	1.946	4.09	2.866	2.48	3.745	2.05	4.944	2.00	6.667	2.28
18	1.953	4.12	2.882	2.51	3.770	2.07	4.979	2.00	6.695	2.28
36	1.973	4.23	2.932	2.61	3.856	2.13	5.087	2.02	6.786	2.26
54	2.004	4.40	3.014	2.77	3.994	2.26	5.279	2.07	6.966	2.20
72	2.046	4.61	3.122	2.98	4.181	2.44	5.555	2.19	7.284	2.17
90	2.095	4.87	3.249	3.24	4.408	2.67	5.909	2.37	7.752	2.26
108	2.146	5.12	3.384	3.52	4.668	2.95	6.310	2.61	8.325	2.45
126	2.195	5.40	3.513	3.80	4.891	3.22	6.709	2.87	8.927	2.69
144	2.235	5.61	3.620	4.02	5.092	3.44	7.050	3.11	9.453	2.91
162	2.262	5.76	3.692	4.18	5.226	3.61	7.281	3.27	9.813	3.08
180	2.271	5.81	3.717	4.23	5.273	3.67	7.362	3.33	9.931	3.13
$z = 1.5$		$z = 5$		$z = 9$		$z = 16$		$z = 24$		
0	2.137	3.57	3.104	2.30	3.950	2.01	5.350	2.06	7.127	2.31
18	2.146	3.61	3.124	2.33	3.980	2.02	5.387	2.05	7.156	2.31
36	2.171	3.71	3.133	2.42	4.069	2.08	5.494	2.04	7.245	2.31
54	2.211	3.88	3.281	2.57	4.219	2.19	5.693	2.07	7.414	2.27
72	2.253	4.10	3.410	2.78	4.425	2.36	5.990	2.16	7.721	2.20
90	2.325	4.37	3.563	3.03	4.675	2.59	6.379	2.32	8.203	2.25
108	2.390	4.64	3.725	3.31	4.948	2.86	6.827	2.55	8.814	2.42
126	2.432	4.90	3.882	3.59	5.213	3.13	7.278	2.81	9.462	2.66
144	2.503	5.12	4.012	3.82	5.437	3.36	7.666	3.04	10.03	2.88
162	2.537	5.27	4.099	3.97	5.587	3.52	7.929	3.21	10.42	3.04
180	2.549	5.32	4.130	4.03	5.640	3.58	8.022	3.26	10.56	3.10
$z = 2$		$z = 6$		$z = 10$		$z = 18$				
0	2.307	3.22	3.327	2.17	4.150	1.99	5.772	2.16		
18	2.317	3.25	3.350	2.20	4.181	2.00	5.804	2.14		
36	2.327	3.36	3.418	2.28	4.276	2.05	5.909	2.10		
54	2.395	3.53	3.521	2.43	4.437	2.15	6.110	2.09		
72	2.460	3.75	3.680	2.63	4.658	2.31	6.421	2.15		
90	2.534	4.01	3.860	2.88	4.932	2.53	6.842	2.29		
108	2.613	4.29	4.049	3.16	5.231	2.79	7.334	2.51		
126	2.688	4.55	4.233	3.43	5.523	3.06	7.836	2.76		
144	2.750	4.78	4.386	3.66	5.771	3.30	8.271	2.99		
162	2.792	4.92	4.489	3.82	5.937	3.46	8.566	3.15		
180	2.806	4.96	4.525	3.87	5.995	3.51	8.671	3.21		

Table 63

 $M_\infty = 6, \gamma = 1.4, \theta_b = 5^\circ, \alpha = 5^\circ$ 

$\Psi$	R	$\xi \cdot 10$	R	$\xi \cdot 10$	R	$\xi \cdot 10$	R	$\xi \cdot 10$
$Z = 0.5$								
0	1.764	4.72	2.625	2.71	3.530	1.96	4.417	1.63
18	1.770	4.76	2.639	2.74	3.558	1.99	4.460	1.66
36	1.785	4.86	2.681	2.85	3.640	2.09	4.588	1.75
54	1.810	5.04	2.748	3.02	3.772	2.24	4.797	1.90
72	1.843	5.24	2.837	3.24	3.948	2.46	5.079	2.10
90	1.881	5.49	2.940	3.50	4.157	2.72	5.417	2.36
108	1.921	5.76	3.049	3.79	4.380	3.01	5.783	2.65
126	1.959	6.01	3.153	4.06	4.594	3.29	6.138	2.93
144	1.991	6.22	3.240	4.28	4.774	3.52	6.438	3.17
162	2.012	6.36	3.298	4.44	4.894	3.68	6.639	3.34
180	2.020	5.40	3.318	4.49	4.936	3.74	6.710	3.39
$Z = 1$								
	$Z = 4$		$Z = 8$		$Z = 14$			
0	1.981	3.98	2.881	2.42	3.722	1.87	4.736	1.56
18	1.988	4.02	2.899	2.46	3.752	1.90	4.785	1.59
36	2.009	4.12	2.951	2.56	3.844	1.99	4.931	1.67
54	2.042	4.29	3.035	2.72	3.992	2.15	5.169	1.82
72	2.085	4.51	3.146	2.95	4.190	2.36	5.492	2.02
90	2.136	4.77	3.275	3.21	4.424	2.62	5.881	2.27
108	2.190	5.04	3.413	3.49	4.676	2.91	6.304	2.56
126	2.241	5.30	3.544	3.77	4.919	3.19	6.716	2.84
144	2.283	5.51	3.654	4.00	5.122	3.43	7.064	3.09
162	2.311	5.66	3.727	4.15	5.258	3.59	7.299	3.25
180	2.321	5.71	3.752	4.21	5.306	3.64	7.381	3.31
$Z = 1.5$								
	$Z = 5$		$Z = 9$		$Z = 16$			
0	2.167	3.50	3.114	2.22	3.905	1.79	5.043	1.50
18	2.176	3.53	3.135	2.26	3.939	1.82	5.097	1.53
36	2.202	3.64	3.197	2.36	4.040	1.91	5.259	1.61
54	2.244	3.81	3.297	2.52	4.203	2.07	5.526	1.75
72	2.298	4.03	3.430	2.74	4.422	2.28	5.890	1.95
90	2.362	4.29	3.586	3.00	4.683	2.54	6.330	2.21
108	2.429	4.57	3.752	3.29	4.963	2.83	6.809	2.49
126	2.494	4.83	3.911	3.56	5.234	3.11	7.279	2.78
144	2.547	5.05	4.043	3.80	5.461	3.35	7.676	3.02
162	2.582	5.20	4.132	3.95	5.613	3.51	7.944	3.19
180	2.594	5.25	4.163	4.01	5.667	3.56	8.039	3.25
$Z = 2$								
	$Z = 6$		$Z = 10$					
0	2.333	3.16	3.328	2.07	4.081	1.73		
18	2.344	3.19	3.353	2.11	4.118	1.76		
36	2.375	3.30	3.425	2.20	4.228	1.85		
54	2.425	3.47	3.541	2.36	4.407	2.00		
72	2.491	3.69	3.696	2.58	4.647	2.21		
90	2.568	3.96	3.878	2.85	4.934	2.47		
108	2.649	4.24	4.073	3.13	5.242	2.76		
126	2.727	4.50	4.259	3.41	5.541	3.04		
144	2.791	4.72	4.415	3.64	5.792	3.28		
162	2.834	4.87	4.520	3.80	5.961	3.44		
180	2.849	4.92	4.556	3.86	6.020	3.50		

Table 64

 $M_\infty = 4, \gamma = 1.4, \theta_b = 15^\circ, \alpha = 5^\circ$ 

$\varphi$	R	$\xi \cdot 10$	R	$\xi \cdot 10$	R	$\xi \cdot 10$	R	$\xi \cdot 10$	R	$\xi \cdot 10$
	$z = 0.5$		$z = 3$		$z = 7$		$z = 14$		$z = 30$	
0	1.808	5.74	2.893	3.60	4.243	3.39	6.745	3.71	12.78	3.80
18	1.814	5.78	2.907	3.63	4.263	3.39	6.765	3.71	12.81	3.80
36	1.830	5.89	2.950	3.73	4.327	3.39	6.828	3.72	12.91	3.83
54	1.855	6.06	3.020	3.89	4.438	3.41	6.939	3.72	13.07	3.87
72	1.889	6.29	3.112	4.12	4.593	3.50	7.106	3.72	13.28	3.91
90	1.929	6.56	3.220	4.39	4.801	3.69	7.343	3.70	13.56	3.97
108	1.971	6.84	3.334	4.68	5.026	3.93	7.666	3.71	13.90	4.02
126	2.011	7.11	3.443	4.96	5.246	4.20	8.036	3.85	14.28	4.05
144	2.044	7.33	3.535	5.20	5.432	4.43	8.373	4.04	14.72	4.00
162	2.066	7.48	3.595	5.36	5.556	4.59	8.606	4.19	15.10	4.02
180	2.074	7.53	3.617	5.41	5.600	4.65	8.689	4.24	15.26	4.04
	$z = 1$		$z = 4$		$z = 8$		$z = 18$		$z = 34$	
0	2.073	4.90	3.241	3.38	4.585	3.45	8.243	3.76	14.30	3.80
18	2.080	4.94	3.258	3.41	4.606	3.45	8.255	3.77	14.34	3.81
36	2.101	5.05	3.310	3.49	4.669	3.44	8.333	3.78	14.44	3.83
54	2.136	5.23	3.395	3.63	4.781	3.45	8.449	3.81	14.62	3.87
72	2.182	5.46	3.509	3.84	4.949	3.49	8.619	3.83	14.85	3.92
90	2.235	5.73	3.644	4.10	5.157	3.63	8.853	3.84	15.16	3.98
108	2.291	6.02	3.787	4.39	5.416	3.85	9.167	3.80	15.52	4.04
126	2.344	6.29	3.924	4.67	5.662	4.11	9.571	3.83	15.92	4.10
144	2.389	6.52	4.039	4.91	5.871	4.34	9.974	3.96	16.33	4.07
162	2.418	6.67	4.116	5.06	6.011	4.50	10.26	4.09	16.72	4.04
180	2.429	6.73	4.143	5.12	6.060	4.55	10.36	4.14	16.88	4.05
	$z = 1.5$		$z = 5$		$z = 9$		$z = 22$			
0	2.304	4.37	3.575	3.31	4.933	3.50	9.752	3.78		
18	2.313	4.41	3.594	3.32	4.953	3.50	9.777	3.78		
36	2.340	4.52	3.653	3.38	5.017	3.50	9.853	3.81		
54	2.384	4.70	3.751	3.49	5.128	3.50	9.982	3.84		
72	2.441	4.94	3.884	3.67	5.299	3.51	10.16	3.88		
90	2.508	5.21	4.044	3.91	5.529	3.60	10.40	3.91		
108	2.578	5.50	4.216	4.19	5.799	3.80	10.71	3.92		
126	2.646	5.78	4.381	4.46	6.069	4.04	11.11	3.88		
144	2.702	6.01	4.519	4.70	6.301	4.27	11.55	3.94		
162	2.739	6.17	4.612	4.86	6.457	4.42	11.89	4.04		
180	2.752	6.22	4.644	4.92	6.513	4.48	12.01	4.08		
	$z = 2$		$z = 6$		$z = 10$		$z = 26$			
0	2.513	4.02	3.907	3.33	5.286	3.55	11.26	3.79		
18	2.524	4.06	3.927	3.33	5.306	3.55	11.29	3.80		
36	2.557	4.17	3.989	3.35	5.370	3.55	11.38	3.82		
54	2.610	4.35	4.096	3.42	5.481	3.55	11.52	3.86		
72	2.679	4.58	4.246	3.56	5.651	3.54	11.72	3.90		
90	2.759	4.85	4.428	3.78	5.889	3.59	11.98	3.95		
108	2.844	5.15	4.627	4.04	6.177	3.75	12.30	3.99		
126	2.925	5.43	4.820	4.31	6.471	3.98	12.68	3.97		
144	2.993	5.66	4.982	4.55	6.712	4.21	13.13	3.95		
162	3.038	5.82	5.090	4.71	6.897	4.36	13.50	4.01		
180	3.054	5.87	5.129	4.77	6.958	4.42	13.64	4.05		

Table 65

 $M_{\infty} = 4, \gamma = 1.4, \theta_b = 10^\circ, \alpha = 5^\circ$ 

$\varphi$	R	$\xi \cdot 10$	R	$\xi \cdot 10$	R	$\xi \cdot 10$	R	$\xi \cdot 10$	R	$\xi \cdot 10$
	$z = 0.5$		$z = 3$		$z = 7$		$z = 14$		$z = 30$	
0	1.857	5.56	2.918	3.51	4.149	2.80	5.989	2.55	10.28	2.80
18	1.863	5.60	2.933	3.54	4.178	2.83	6.036	2.56	10.33	2.81
36	1.879	5.71	2.978	3.65	4.264	2.93	6.178	2.62	10.49	2.83
54	1.907	5.68	3.050	3.83	4.405	3.09	6.417	2.74	10.79	2.83
72	1.943	6.11	3.144	4.06	4.591	3.31	6.748	2.92	11.28	2.83
90	1.984	6.38	3.255	4.34	4.812	3.58	7.151	3.17	12.00	2.95
108	2.028	6.67	3.373	4.64	5.047	3.88	7.590	3.46	12.86	3.18
126	2.071	6.93	3.485	4.92	5.274	4.16	8.018	3.74	13.73	3.45
144	2.106	7.16	3.578	5.16	5.464	4.41	8.379	3.99	14.48	3.70
162	2.120	7.31	3.640	5.32	5.590	4.57	8.621	4.15	14.99	3.87
180	2.138	7.36	3.662	5.38	5.635	4.63	8.707	4.21	15.18	3.93
	$z = 1$		$z = 4$		$z = 8$		$z = 18$		$z = 34$	
0	2.114	4.79	3.254	3.23	4.425	2.72	7.015	2.59	11.40	2.81
18	2.122	4.83	3.273	3.26	4.458	2.75	7.066	2.59	11.46	2.83
36	2.144	4.94	3.328	3.37	4.553	2.84	7.224	2.62	11.64	2.86
54	2.180	5.12	3.418	3.54	4.709	3.00	7.503	2.69	11.94	2.89
72	2.228	5.35	3.536	3.78	4.918	3.22	7.901	2.84	12.43	2.88
90	2.283	5.62	3.675	4.05	5.165	3.49	8.399	3.07	13.18	2.95
108	2.342	5.92	3.822	4.35	5.431	3.78	8.950	3.34	14.13	3.16
126	2.398	6.20	3.962	4.64	5.686	4.07	9.492	3.63	15.11	3.42
144	2.444	6.42	4.080	4.88	5.900	4.31	9.995	3.87	15.96	3.66
162	2.475	6.57	4.157	5.04	5.043	4.48	10.26	4.04	16.54	3.83
180	2.485	6.62	4.185	5.09	6.094	4.54	10.37	4.10	16.74	3.89
	$z = 1.5$		$z = 5$		$z = 10$		$z = 22$		$z = 38$	
0	2.340	4.29	3.567	3.04	4.959	2.62	8.070	2.68	12.53	2.82
18	2.350	4.33	3.590	3.07	4.997	2.64	8.121	2.68	12.59	2.83
36	2.378	4.44	3.656	3.18	5.110	2.73	8.283	2.68	12.78	2.87
54	2.421	4.62	3.762	3.35	5.297	2.87	8.980	2.70	13.10	2.92
72	2.483	4.86	3.904	3.58	5.548	3.08	9.030	2.81	13.59	2.93
90	2.552	5.14	4.070	3.85	5.849	3.35	9.614	3.01	14.36	2.96
108	2.625	5.43	4.246	4.15	6.173	3.64	10.27	3.27	15.39	3.14
126	2.695	5.71	4.416	4.43	6.486	3.93	10.93	3.55	16.47	3.40
144	2.753	5.94	4.557	4.67	6.749	4.17	11.49	3.80	17.42	3.64
162	2.791	6.09	4.651	4.84	6.925	4.34	11.86	3.96	18.06	3.80
180	2.805	6.15	4.684	4.89	6.987	4.39	12.00	4.02	18.29	3.86
	$z = 2$		$z = 6$		$z = 12$		$z = 26$			
0	2.546	3.95	3.864	2.90	5.477	2.56	9.162	2.76		
18	2.558	3.99	3.890	2.93	5.520	2.59	9.214	2.77		
36	2.592	4.10	3.966	3.03	5.649	2.66	9.374	2.77		
54	2.646	4.28	4.090	3.20	5.864	2.79	9.673	2.76		
72	2.717	4.52	4.254	3.43	6.156	2.99	10.15	2.81		
90	2.800	4.80	4.447	3.70	6.509	3.25	10.81	2.97		
108	2.888	5.09	4.654	3.99	6.890	3.53	11.57	3.22		
126	2.971	5.37	4.851	4.28	7.261	3.82	12.34	3.50		
144	3.041	5.61	5.017	4.52	7.573	4.07	13.00	3.74		
162	3.087	5.76	5.127	4.69	7.782	4.23	13.44	3.91		
180	3.104	5.82	5.166	4.74	7.856	4.29	13.60	3.97		

Table 66

 $H = 30, V_\infty = 7500, \theta_b = 15^\circ, \alpha = 5^\circ$ 

$\lambda$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$
$z = 2, \varphi = 0^\circ$												
0	2.68	0.837	3.61	0	2.68	0.521	3.39	1.97	2.68	0.245	3.05	0
0.1	2.56	0.838	3.31	0	2.53	0.523	2.95	1.50	2.67	0.245	2.71	0
0.2	2.45	0.838	2.96	0	2.56	0.525	2.42	1.15	2.65	0.245	2.21	0
0.3	2.35	0.837	2.59	0	2.49	0.527	1.92	0.926	2.58	0.245	1.69	0
0.4	2.25	0.834	2.21	0	2.41	0.527	1.40	0.759	2.50	0.244	1.15	0
0.5	2.18	0.836	1.82	0	2.32	0.519	0.953	0.666	2.46	0.244	0.683	0
0.6	2.12	0.844	1.42	0	2.30	0.512	0.647	0.641	2.43	0.244	0.425	0
0.7	2.07	0.858	1.06	0	2.18	0.506	0.468	0.637	2.39	0.244	0.292	0
0.8	2.06	0.875	0.799	0	2.13	0.499	0.383	0.628	2.35	0.245	0.233	0
0.9	2.03	0.898	0.638	0	2.11	0.508	0.356	0.646	2.31	0.250	0.201	0
1.0	2.02	0.952	0.582	0	2.10	0.529	0.344	0.677	2.33	0.262	0.200	0
$z = 2, \varphi = 90^\circ$												
0	2.68	0.505	3.37	1.20	2.58	0.270	3.09	0				
0.1	2.53	0.507	3.12	1.06	2.66	0.269	2.79	0				
0.2	2.59	0.511	2.80	0.947	2.65	0.268	2.40	0				
0.3	2.54	0.517	2.47	0.863	2.52	0.266	1.98	0				
0.4	2.53	0.529	2.14	0.803	2.60	0.266	1.58	0				
0.5	2.48	0.534	1.78	0.755	2.58	0.265	1.14	0				
0.6	2.49	0.556	1.41	0.722	2.52	0.261	0.784	0				
0.7	2.50	0.574	1.05	0.716	2.55	0.276	0.532	0				
0.8	2.47	0.598	0.765	0.721	2.57	0.294	0.381	0				
0.9	2.51	0.653	0.590	0.719	2.61	0.313	0.297	0				
1.0	2.66	0.796	0.495	0.708	2.68	0.380	0.260	0				
$z = 2, \varphi = 180^\circ$												
0	2.68	0.347	3.20	0	2.68	1.18	3.78	0				
0.1	2.72	0.345	2.98	0	2.63	1.19	1.98	0				
0.2	2.76	0.347	2.69	0	2.60	1.18	0.942	0				
0.3	2.79	0.348	2.39	0	2.57	1.18	0.522	0				
0.4	2.80	0.351	2.09	0	2.55	1.18	0.502	0				
0.5	2.87	0.368	1.78	0	2.52	1.18	0.616	0				
0.6	2.87	0.379	1.42	0	2.49	1.18	0.697	0				
0.7	2.84	0.383	1.06	0	2.43	1.18	0.710	0				
0.8	2.98	0.428	0.783	0	2.43	1.17	0.705	0				
0.9	3.20	0.528	0.575	0	2.40	1.16	0.700	0				
1.0	3.46	0.714	0.447	0	2.37	1.16	0.693	0				
$z = 5, \varphi = 0^\circ$												
0	2.68	1.18	3.79	0	2.68	0.678	3.51	3.32				
0.1	2.60	1.18	3.12	0	2.63	0.680	2.58	1.79				
0.2	2.52	1.18	2.41	0	2.58	0.683	1.56	1.04				
0.3	2.46	1.18	1.74	0	2.52	0.681	0.967	0.686				
0.4	2.39	1.17	1.15	0	2.48	0.675	0.555	0.567				
0.5	2.33	1.15	0.764	0	2.43	0.666	0.403	0.554				
0.6	2.28	1.13	0.587	0	2.40	0.658	0.363	0.562				
0.7	2.20	1.08	0.537	0	2.37	0.645	0.359	0.601				
0.8	2.15	1.04	0.541	0	2.32	0.615	0.360	0.669				
0.9	2.09	1.00	0.558	0	2.28	0.600	0.364	0.727				
1.0	2.00	0.945	0.578	0	2.24	0.585	0.376	0.781				
$z = 5, \varphi = 90^\circ$												

Table 67

$H = 30, V_\infty = 7500, \theta_b = 5^\circ, \alpha = 5^\circ$

$\lambda$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$		
$Z = 4.5, \varphi = 0^\circ$					$Z = 9.5, \varphi = 90^\circ$					$Z = 14.5, \varphi = 180^\circ$				
0	0.875	0.249	3.06	0	0.875	0.107	2.72	1.94	0.875	0.0703	2.56	0		
0.1	0.799	0.249	2.71	0	0.899	0.109	2.32	1.48	1.13	0.0699	2.45	0		
0.2	0.746	0.249	2.32	0	0.921	0.113	1.92	1.15	1.29	0.0698	2.21	0		
0.3	0.707	0.249	1.94	0	0.949	0.115	1.53	0.936	1.40	0.0699	1.90	0		
0.4	0.689	0.250	1.57	0	0.974	0.118	1.15	0.788	1.47	0.0701	1.51	0		
0.5	0.691	0.252	1.19	0	0.999	0.122	0.771	0.702	1.52	0.0701	1.03	0		
0.6	0.709	0.261	0.861	0	1.01	0.127	0.501	0.670	1.56	0.0704	0.611	0		
0.7	0.742	0.278	0.600	0	1.03	0.133	0.334	0.646	1.60	0.0736	0.335	0		
0.8	0.791	0.301	0.431	0	1.12	0.151	0.249	0.632	1.66	0.0797	0.200	0		
0.9	0.855	0.335	0.334	0	1.18	0.176	0.196	0.621	1.75	0.0969	0.145	0		
1.0	0.984	0.426	0.296	0	1.29	0.230	0.174	0.608	1.91	0.148	0.127	0		
$Z = 4.5, \varphi = 90^\circ$					$Z = 9.5, \varphi = 180^\circ$									
0	0.875	0.164	2.89	1.50	0.875	0.0958	2.67	0						
0.1	0.914	0.166	2.64	1.26	1.14	0.0948	2.52	0						
0.2	0.955	0.169	2.32	1.07	1.26	0.0927	2.25	0						
0.3	1.01	0.172	2.01	0.936	1.39	0.0907	1.93	0						
0.4	1.06	0.177	1.68	0.834	1.47	0.0890	1.55	0						
0.5	1.12	0.182	1.33	0.757	1.52	0.0865	1.14	0						
0.6	1.20	0.190	0.965	0.712	1.61	0.0913	0.748	0						
0.7	1.31	0.204	0.657	0.694	1.69	0.0945	0.446	0						
0.8	1.43	0.226	0.455	0.685	1.78	0.102	0.277	0						
0.9	1.59	0.280	0.336	0.668	1.93	0.130	0.195	0						
1.0	1.81	0.404	0.273	0.643	2.14	0.207	0.161	0						
$Z = 14.5, \varphi = 180^\circ$					$Z = 14.5, \varphi = 0^\circ$									
0	0.875	0.133	2.80	0	0.875	0.193	2.95	0						
0.1	1.10	0.133	2.64	0	0.733	0.195	1.87	0						
0.2	1.27	0.133	2.39	0	0.652	0.195	1.21	0						
0.3	1.37	0.134	2.11	0	0.585	0.195	0.73	0						
0.4	1.49	0.136	1.81	0	0.524	0.194	0.444	0						
0.5	1.61	0.139	1.48	0	0.464	0.189	0.289	0						
0.6	1.70	0.143	1.09	0	0.420	0.188	0.228	0						
0.7	1.83	0.149	0.753	0	0.388	0.189	0.194	0						
0.8	2.04	0.174	0.507	0	0.366	0.190	0.178	0						
0.9	2.36	0.232	0.343	0	0.358	0.194	0.164	0						
1.0	2.66	0.376	0.258	0	0.363	0.206	0.160	0						
$Z = 9.5, \varphi = 0^\circ$					$Z = 14.5, \varphi = 90^\circ$									
0	0.875	0.194	2.95	0	0.875	0.0828	2.62	2.40						
0.1	0.748	0.194	2.31	0	0.877	0.0866	2.03	1.65						
0.2	0.665	0.194	1.75	0	0.877	0.0887	1.56	1.19						
0.3	0.599	0.194	1.27	0	0.876	0.0909	1.15	0.914						
0.4	0.555	0.195	0.856	0	0.875	0.0927	0.770	0.753						
0.5	0.522	0.196	0.559	0	0.886	0.0957	0.482	0.681						
0.6	0.506	0.201	0.378	0	0.910	0.101	0.305	0.642						
0.7	0.501	0.205	0.278	0	0.921	0.107	0.216	0.618						
0.8	0.507	0.215	0.234	0	0.952	0.121	0.175	0.603						
0.9	0.516	0.232	0.204	0	0.969	0.139	0.150	0.600						
1.0	0.543	0.261	0.192	0	1.08	0.171	0.139	0.595						

Table 68

 $H = 30, V_\infty = 5000, \theta_b = 15^\circ, \alpha = 5^\circ$ 

$\lambda$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$
$z = 2, \varphi = 0^\circ$					$z = 5, \varphi = 90^\circ$					$z = 10, \varphi = 180^\circ$		
0	2.68	0.902	3.38	0	2.68	0.538	3.10	1.72	2.68	0.262	2.75	0
0.1	2.57	0.903	3.05	0	2.60	0.539	2.65	1.30	2.67	0.261	2.36	0
0.2	2.47	0.902	2.66	0	2.51	0.540	2.13	1.02	2.62	0.261	1.85	0
0.3	2.38	0.901	2.29	0	2.44	0.541	1.68	0.870	2.58	0.261	1.36	0
0.4	2.28	0.901	1.93	0	2.37	0.542	1.24	0.758	2.50	0.260	0.903	0
0.5	2.20	0.900	1.57	0	2.30	0.543	0.910	0.675	2.46	0.261	0.604	0
0.6	2.13	0.898	1.26	0	2.24	0.545	0.693	0.620	2.41	0.262	0.431	0
0.7	2.05	0.898	1.02	0	2.17	0.546	0.557	0.605	2.36	0.266	0.341	0
0.8	2.01	0.891	0.843	0	2.15	0.550	0.480	0.600	2.34	0.273	0.295	0
0.9	1.96	0.910	0.718	0	2.12	0.556	0.426	0.613	2.32	0.282	0.264	0
1.0	1.98	0.976	0.651	0	2.10	0.582	0.415	0.639	2.33	0.293	0.259	0
$z = 2, \varphi = 90^\circ$					$z = 5, \varphi = 180^\circ$					$z = 16, \varphi = 0^\circ$		
0	2.68	0.590	3.15	1.13	2.68	0.290	2.79	0	2.68	1.22	3.56	0
0.1	2.62	0.590	2.86	1.03	2.67	0.290	2.49	0	2.63	1.23	0.898	0
0.2	2.59	0.591	2.52	0.904	2.65	0.291	2.10	0	2.60	1.22	0.774	0
0.3	2.56	0.593	2.18	0.828	2.63	0.292	1.72	0	2.55	1.22	0.673	0
0.4	2.53	0.596	1.85	0.773	2.62	0.295	1.34	0	2.52	1.21	0.676	0
0.5	2.51	0.597	1.52	0.737	2.60	0.298	0.976	0	2.47	1.21	0.731	0
0.6	2.49	0.600	1.21	0.709	2.59	0.305	0.725	0	2.44	1.19	0.762	0
0.7	2.48	0.608	0.956	0.683	2.58	0.316	0.549	0	2.39	1.19	0.780	0
0.8	2.47	0.620	0.788	0.676	2.53	0.323	0.435	0	2.35	1.18	0.773	0
0.9	2.53	0.704	0.672	0.668	2.59	0.338	0.366	0	2.31	1.16	0.761	0
1.0	2.70	0.863	0.587	0.660	2.69	0.420	0.303	0	2.27	1.15	0.753	0
$z = 2, \varphi = 180^\circ$					$z = 10, \varphi = 0^\circ$					$z = 16, \varphi = 90^\circ$		
0	2.68	0.413	2.97	0	2.68	1.23	3.56	0	2.68	0.709	3.24	2.93
0.1	2.69	0.413	2.72	0	2.62	1.24	1.86	0	2.62	0.712	1.42	0.781
0.2	2.70	0.409	2.40	0	2.59	1.23	0.992	0	2.58	0.712	0.670	0.609
0.3	2.71	0.405	2.10	0	2.55	1.23	0.656	0	2.55	0.712	0.531	0.582
0.4	2.73	0.404	1.80	0	2.52	1.22	0.625	0	2.52	0.710	0.480	0.582
0.5	2.75	0.403	1.47	0	2.48	1.22	0.678	0	2.49	0.706	0.452	0.604
0.6	2.79	0.406	1.16	0	2.44	1.21	0.724	0	2.47	0.703	0.455	0.651
0.7	2.83	0.417	0.939	0	2.41	1.20	0.735	0	2.44	0.699	0.469	0.713
0.8	3.05	0.485	0.775	0	2.37	1.19	0.746	0	2.42	0.693	0.476	0.769
0.9	3.28	0.604	0.648	0	2.33	1.18	0.759	0	2.39	0.688	0.478	0.809
1.0	3.54	0.796	0.549	0	2.28	1.16	0.758	0	2.36	0.679	0.482	0.849
$z = 5, \varphi = 0^\circ$					$z = 10, \varphi = 90^\circ$					$z = 16, \varphi = 180^\circ$		
0	2.68	1.12	3.50	0	2.68	0.666	3.21	2.83	2.68	0.287	2.79	0
0.1	2.58	1.12	2.81	0	2.63	0.667	2.20	1.52	2.67	0.287	2.34	0
0.2	2.49	1.12	2.13	0	2.55	0.672	1.49	1.02	2.63	0.286	1.65	0
0.3	2.41	1.11	1.56	0	2.49	0.673	0.934	0.764	2.58	0.285	1.06	0
0.4	2.33	1.11	1.12	0	2.43	0.667	0.624	0.592	2.52	0.283	0.628	0
0.5	2.25	1.09	0.827	0	2.37	0.664	0.478	0.552	2.45	0.282	0.384	0
0.6	2.18	1.07	0.689	0	2.32	0.649	0.430	0.562	2.39	0.278	0.300	0
0.7	2.10	1.03	0.617	0	2.27	0.637	0.411	0.592	2.31	0.265	0.258	0
0.8	2.02	0.989	0.603	0	2.21	0.623	0.414	0.627	2.25	0.256	0.242	0
0.9	1.94	0.940	0.607	0	2.17	0.597	0.417	0.669	2.21	0.248	0.236	0
1.0	1.86	0.906	0.612	0	2.12	0.569	0.419	0.710	2.19	0.253	0.236	0

Table 69

$H = 30, V_\infty = 5000, \theta_b = 10^\circ, \alpha = 5^\circ$

$\lambda$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$
$z = 5, \varphi = 0^\circ$												
					$z = 10, \varphi = 90^\circ$					$z = 14, \varphi = 180^\circ$		
0	1.76	0.495	3.06	0	1.76	0.248	2.72	2.14	1.76	0.121	2.42	0
0.1	1.64	0.495	2.55	0	1.73	0.251	2.15	1.50	1.80	0.121	2.16	0
0.2	1.53	0.495	2.05	0	1.67	0.253	1.58	1.11	1.82	0.121	1.78	0
0.3	1.45	0.495	1.60	0	1.61	0.255	1.13	0.912	1.83	0.120	1.30	0
0.4	1.37	0.495	1.20	0	1.54	0.256	0.753	0.728	1.84	0.121	0.886	0
0.5	1.31	0.495	0.891	0	1.50	0.258	0.531	0.632	1.85	0.122	0.573	0
0.6	1.26	0.495	0.685	0	1.46	0.261	0.401	0.599	1.86	0.127	0.382	0
0.7	1.21	0.496	0.557	0	1.43	0.266	0.332	0.587	1.87	0.134	0.287	0
0.8	1.17	0.502	0.471	0	1.42	0.277	0.295	0.583	1.89	0.143	0.233	0
0.9	1.15	0.513	0.416	0	1.43	0.289	0.272	0.592	1.93	0.159	0.205	0
1.0	1.14	0.532	0.397	0	1.45	0.308	0.266	0.608	1.98	0.193	0.201	0
					$z = 10, \varphi = 180^\circ$					$z = 20, \varphi = 0^\circ$		
0	1.76	0.280	2.78	1.45	1.76	0.138	2.47	0	1.76	0.722	3.25	0
0.1	1.74	0.283	2.44	1.18	1.82	0.137	2.23	0	1.73	0.725	0.655	0
0.2	1.72	0.287	2.04	0.981	1.85	0.137	1.86	0	1.68	0.726	0.475	0
0.3	1.71	0.293	1.66	0.859	1.87	0.137	1.47	0	1.66	0.724	0.423	0
0.4	1.70	0.295	1.30	0.778	1.89	0.139	1.08	0	1.63	0.719	0.418	0
0.5	1.68	0.302	0.956	0.706	1.91	0.142	0.721	0	1.60	0.715	0.428	0
0.6	1.68	0.311	0.721	0.658	1.93	0.146	0.503	0	1.57	0.709	0.448	0
0.7	1.67	0.321	0.558	0.637	1.96	0.154	0.365	0	1.54	0.702	0.463	0
0.8	1.68	0.335	0.448	0.626	1.99	0.167	0.284	0	1.51	0.693	0.470	0
0.9	1.72	0.361	0.377	0.623	2.03	0.188	0.242	0	1.47	0.685	0.474	0
1.0	1.80	0.438	0.343	0.617	2.15	0.240	0.229	0	1.43	0.671	0.477	0
					$z = 14, \varphi = 0^\circ$					$z = 20, \varphi = 90^\circ$		
0	1.76	0.196	2.62	0	1.76	0.727	3.26	0	1.76	0.280	2.48	3.73
0.1	1.85	0.196	2.38	0	1.68	0.730	1.59	0	1.69	0.282	1.35	1.43
0.2	1.94	0.197	2.07	0	1.64	0.730	0.889	0	1.62	0.283	0.746	0.981
0.3	2.02	0.197	1.73	0	1.59	0.724	0.549	0	1.55	0.284	0.437	0.638
0.4	2.06	0.198	1.39	0	1.55	0.714	0.431	0	1.50	0.285	0.324	0.563
0.5	2.11	0.201	1.06	0	1.50	0.692	0.400	0	1.46	0.284	0.278	0.550
0.6	2.13	0.205	0.761	0	1.46	0.674	0.400	0	1.42	0.282	0.262	0.558
0.7	2.16	0.214	0.561	0	1.41	0.654	0.401	0	1.39	0.276	0.250	0.572
0.8	2.24	0.236	0.444	0	1.36	0.623	0.402	0	1.37	0.270	0.242	0.598
0.9	2.42	0.288	0.368	0	1.30	0.598	0.405	0	1.34	0.263	0.239	0.612
1.0	2.64	0.401	0.322	0	1.23	0.568	0.418	0	1.29	0.257	0.228	0.635
					$z = 10, \varphi = 0^\circ$					$z = 20, \varphi = 180^\circ$		
0	1.76	0.615	3.17	0	1.76	0.254	2.73	2.80	1.76	0.112	2.38	0
0.1	1.65	0.616	2.09	0	1.72	0.258	1.90	1.64	1.84	0.111	2.15	0
0.2	1.57	0.616	1.37	0	1.66	0.260	1.23	1.14	1.86	0.110	1.71	0
0.3	1.50	0.611	0.858	0	1.59	0.262	0.782	0.845	1.85	0.110	1.22	0
0.4	1.43	0.603	0.603	0	1.53	0.263	0.505	0.642	1.81	0.111	0.736	0
0.5	1.36	0.590	0.464	0	1.47	0.263	0.369	0.585	1.77	0.111	0.434	0
0.6	1.28	0.569	0.416	0	1.42	0.263	0.311	0.570	1.74	0.111	0.279	0
0.7	1.22	0.550	0.389	0	1.37	0.263	0.273	0.567	1.73	0.116	0.218	0
0.8	1.14	0.527	0.371	0	1.33	0.264	0.255	0.578	1.75	0.125	0.191	0
0.9	1.06	0.499	0.366	0	1.32	0.265	0.249	0.596	1.78	0.136	0.179	0
1.0	1.01	0.473	0.364	0	1.34	0.272	0.247	0.611	1.83	0.157	0.179	0

Table 70

 $H = 30, V_\infty = 5000, \theta_b = 5^\circ, \alpha = 5^\circ$ 

$\lambda$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$
$z = 4, \varphi = 0^\circ$												
0	0.875	0.293	2.80	0	0.875	0.120	2.41	1.82	0.875	0.0818	2.26	0
0.1	0.836	0.294	2.47	0	0.891	0.123	2.01	1.37	1.10	0.0807	2.14	0
0.2	0.821	0.296	2.10	0	0.905	0.126	1.62	1.10	1.24	0.0801	1.88	0
0.3	0.813	0.299	1.77	0	0.921	0.128	1.25	0.930	1.36	0.0800	1.56	0
0.4	0.809	0.303	1.42	0	0.940	0.131	0.914	0.799	1.44	0.0806	1.19	0
0.5	0.808	0.309	1.09	0	0.966	0.134	0.632	0.704	1.50	0.0809	0.791	0
0.6	0.810	0.316	0.834	0	0.996	0.142	0.462	0.651	1.55	0.0843	0.504	0
0.7	0.815	0.328	0.644	0	1.03	0.161	0.355	0.628	1.60	0.0914	0.326	0
0.8	0.841	0.346	0.523	0	1.08	0.176	0.287	0.617	1.65	0.101	0.239	0
0.9	0.952	0.405	0.442	0	1.15	0.198	0.247	0.611	1.75	0.125	0.201	0
1.0	1.12	0.521	0.392	0	1.26	0.250	0.234	0.600	1.93	0.180	0.193	0
$z = 10, \varphi = 90^\circ$												
0	0.875	0.209	2.65	1.40	0.875	0.0985	2.35	0	0.875	0.233	2.69	0
0.1	0.962	0.212	2.40	1.17	1.12	0.0980	2.19	0	0.726	0.233	1.13	0
0.2	1.06	0.215	2.09	1.00	1.27	0.0979	1.93	0	0.624	0.233	0.630	0
0.3	1.16	0.218	1.78	0.889	1.39	0.0990	1.64	0	0.543	0.232	0.382	0
0.4	1.24	0.221	1.48	0.806	1.50	0.100	1.28	0	0.470	0.228	0.300	0
0.5	1.31	0.225	1.18	0.747	1.58	0.102	0.916	0	0.413	0.220	0.256	0
0.6	1.32	0.230	0.889	0.708	1.64	0.103	0.602	0	0.350	0.212	0.232	0
0.7	1.36	0.238	0.664	0.682	1.69	0.110	0.397	0	0.300	0.203	0.219	0
0.8	1.49	0.276	0.522	0.661	1.78	0.123	0.295	0	0.276	0.203	0.219	0
0.9	1.70	0.352	0.428	0.642	1.91	0.155	0.243	0	0.266	0.203	0.212	0
1.0	1.94	0.493	0.375	0.623	2.13	0.232	0.223	0	0.240	0.195	0.208	0
$z = 4, \varphi = 90^\circ$												
0	0.875	0.209	2.65	1.40	0.875	0.0985	2.35	0	0.875	0.233	2.69	0
0.1	0.962	0.212	2.40	1.17	1.12	0.0980	2.19	0	0.726	0.233	1.13	0
0.2	1.06	0.215	2.09	1.00	1.27	0.0979	1.93	0	0.624	0.233	0.630	0
0.3	1.16	0.218	1.78	0.889	1.39	0.0990	1.64	0	0.543	0.232	0.382	0
0.4	1.24	0.221	1.48	0.806	1.50	0.100	1.28	0	0.470	0.228	0.300	0
0.5	1.31	0.225	1.18	0.747	1.58	0.102	0.916	0	0.413	0.220	0.256	0
0.6	1.32	0.230	0.889	0.708	1.64	0.103	0.602	0	0.350	0.212	0.232	0
0.7	1.36	0.238	0.664	0.682	1.69	0.110	0.397	0	0.300	0.203	0.219	0
0.8	1.49	0.276	0.522	0.661	1.78	0.123	0.295	0	0.276	0.203	0.219	0
0.9	1.70	0.352	0.428	0.642	1.91	0.155	0.243	0	0.266	0.203	0.212	0
1.0	1.94	0.493	0.375	0.623	2.13	0.232	0.223	0	0.240	0.195	0.208	0
$z = 14, \varphi = 0^\circ$												
0	0.875	0.179	2.58	0	0.875	0.210	2.65	0	0.875	0.0836	2.27	2.66
0.1	1.12	0.177	2.39	0	0.722	0.210	1.66	0	0.878	0.0876	1.42	1.60
0.2	1.28	0.175	2.12	0	0.613	0.210	1.06	0	0.863	0.0914	0.955	1.16
0.3	1.44	0.173	1.85	0	0.528	0.210	0.670	0	0.801	0.0944	0.628	0.877
0.4	1.56	0.170	1.55	0	0.470	0.203	0.452	0	0.766	0.0958	0.406	0.691
0.5	1.64	0.169	1.22	0	0.415	0.205	0.350	0	0.761	0.100	0.296	0.636
0.6	1.74	0.168	0.924	0	0.380	0.202	0.292	0	0.773	0.105	0.237	0.619
0.7	1.93	0.179	0.706	0	0.357	0.201	0.253	0	0.796	0.112	0.202	0.605
0.8	2.20	0.224	0.550	0	0.355	0.213	0.239	0	0.828	0.127	0.189	0.597
0.9	2.49	0.307	0.439	0	0.368	0.227	0.232	0	0.875	0.143	0.182	0.596
1.0	2.81	0.467	0.360	0	0.389	0.243	0.230	0	0.931	0.164	0.183	0.595
$z = 14, \varphi = 90^\circ$												
0	0.875	0.212	2.65	0	0.875	0.0992	2.34	2.13	0.875	0.0683	2.19	0
0.1	0.732	0.212	1.98	0	0.883	0.102	1.78	1.49	1.12	0.0671	2.09	0
0.2	0.645	0.212	1.45	0	0.893	0.105	1.34	1.15	1.26	0.0665	1.85	0
0.3	0.578	0.213	1.02	0	0.875	0.108	0.962	0.939	1.33	0.0661	1.51	0
0.4	0.520	0.214	0.703	0	0.862	0.111	0.661	0.765	1.39	0.0660	1.10	0
0.5	0.481	0.215	0.506	0	0.857	0.115	0.449	0.671	1.43	0.0661	0.668	0
0.6	0.451	0.216	0.396	0	0.873	0.119	0.335	0.635	1.47	0.0679	0.397	0
0.7	0.456	0.217	0.329	0	0.914	0.132	0.270	0.616	1.50	0.0756	0.258	0
0.8	0.469	0.230	0.290	0	0.976	0.151	0.232	0.603	1.55	0.0360	0.193	0
0.9	0.494	0.261	0.263	0	1.00	0.168	0.210	0.598	1.62	0.102	0.172	0
1.0	0.530	0.288	0.256	0	1.08	0.201	0.205	0.596	1.76	0.141	0.169	0
$z = 20, \varphi = 180^\circ$												

Table 71

 $M_\infty = \infty, \gamma = 1.4, \theta_b = 15^\circ, \alpha = 5^\circ$ 

$\lambda$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$
$z = 5, \varphi = 0^\circ$												
$z = 10, \varphi = 90^\circ$												
0.2	2.67	0.939	2.56	0	2.67	0.567	2.22	2.30	2.67	0.226	1.70	0
0.1	2.55	0.941	2.16	0	2.62	0.569	1.80	1.65	2.62	0.227	1.49	0
0.2	2.44	0.942	1.79	0	2.56	0.574	1.39	1.17	2.57	0.227	1.25	0
0.3	2.32	0.942	1.47	0	2.48	0.575	0.968	0.942	2.52	0.227	1.00	0
0.4	2.22	0.937	1.25	0	2.43	0.575	0.683	0.770	2.47	0.227	0.738	0
0.5	2.12	0.927	1.00	0	2.35	0.575	0.520	0.652	2.42	0.227	0.557	0
0.6	2.04	0.910	0.777	0	2.26	0.566	0.422	0.585	2.38	0.227	0.379	0
0.7	1.96	0.884	0.638	0	2.21	0.550	0.350	0.571	2.33	0.219	0.247	0
0.8	1.87	0.855	0.553	0	2.15	0.522	0.297	0.589	2.31	0.215	0.172	0
0.9	1.80	0.822	0.499	0	2.07	0.502	0.280	0.635	2.28	0.216	0.126	0
1.0	1.74	0.794	0.463	0	2.04	0.484	0.282	0.711	2.26	0.219	0.128	0
$z = 16, \varphi = 180^\circ$												
$z = 5, \varphi = 90^\circ$												
0.2	2.67	0.473	2.11	1.42	2.67	0.225	1.70	0				
0.1	2.59	0.473	1.84	1.20	2.65	0.224	1.51	0				
0.2	2.53	0.478	1.57	0.985	2.61	0.222	1.27	0				
0.3	2.45	0.480	1.29	0.854	2.55	0.219	1.04	0				
0.4	2.37	0.476	1.07	0.775	2.53	0.218	0.841	0				
0.5	2.30	0.472	0.880	0.716	2.50	0.218	0.655	0				
0.6	2.24	0.471	0.703	0.679	2.46	0.218	0.476	0				
0.7	2.19	0.468	0.552	0.666	2.42	0.220	0.334	0				
0.8	2.19	0.501	0.440	0.566	2.40	0.224	0.236	0				
0.9	2.16	0.505	0.352	0.667	2.39	0.233	0.175	0				
1.0	2.09	0.507	0.295	0.667	2.38	0.257	0.150	0				
$z = 16, \varphi = 0^\circ$												
0.2	2.67	0.270	1.79	0	2.67	1.18	2.74	0				
0.1	2.65	0.268	1.64	0	2.62	1.19	1.17	0				
0.2	2.64	0.272	1.44	0	2.59	1.18	0.624	0				
0.3	2.62	0.279	1.18	0	2.55	1.18	0.490	0				
0.4	2.60	0.282	1.00	0	2.51	1.17	0.530	0				
0.5	2.58	0.284	0.809	0	2.47	1.17	0.602	0				
0.6	2.56	0.285	0.635	0	2.43	1.16	0.648	0				
0.7	2.52	0.286	0.493	0	2.39	1.15	0.655	0				
0.8	2.55	0.292	0.393	0	2.35	1.15	0.656	0				
0.9	2.61	0.313	0.310	0	2.31	1.14	0.657	0				
1.0	2.61	0.414	0.241	0	2.27	1.13	0.659	0				
$z = 10, \varphi = 0^\circ$												
$z = 16, \varphi = 90^\circ$												
0.2	2.67	1.25	2.79	0	2.67	0.689	2.35	2.01				
0.1	2.62	1.25	1.93	0	2.63	0.691	1.55	1.35				
0.2	2.58	1.25	1.32	0	2.59	0.695	1.03	0.956				
0.3	2.54	1.25	0.868	0	2.55	0.697	0.708	0.770				
0.4	2.50	1.24	0.627	0	2.52	0.694	0.436	0.667				
0.5	2.46	1.23	0.525	0	2.47	0.683	0.321	0.605				
0.6	2.42	1.20	0.516	0	2.46	0.672	0.301	0.604				
0.7	2.38	1.18	0.535	0	2.42	0.659	0.318	0.657				
0.8	2.33	1.14	0.585	0	2.39	0.643	0.340	0.749				
0.9	2.27	1.12	0.634	0	2.36	0.627	0.353	0.832				
1.0	2.20	1.08	0.632	0	2.32	0.611	0.356	0.872				

Table 72

 $M_\infty = \infty, \gamma = 1.4, \theta_b = 10^\circ, \alpha = 5^\circ$ 

$\lambda$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$
$z = 5, \varphi = 0^\circ$								
0	1.76	0.436	2.06	0	1.76	0.207	1.66	1.64
0.1	1.67	0.437	1.86	0	1.73	0.210	1.41	1.31
0.2	1.55	0.438	1.61	0	1.69	0.210	1.13	1.01
0.3	1.45	0.434	1.37	0	1.62	0.210	0.947	0.870
0.4	1.37	0.432	1.14	0	1.58	0.212	0.802	0.796
0.5	1.31	0.432	0.927	0	1.55	0.213	0.603	0.742
0.6	1.26	0.434	0.733	0	1.53	0.216	0.422	0.701
0.7	1.23	0.441	0.534	0	1.52	0.220	0.330	0.660
0.8	1.20	0.453	0.429	0	1.51	0.229	0.248	0.622
0.9	1.18	0.467	0.351	0	1.50	0.239	0.180	0.615
1.0	1.16	0.489	0.285	0	1.50	0.271	0.158	0.616
$z = 5, \varphi = 90^\circ$								
0	1.76	0.261	1.78	1.30	1.76	0.126	1.44	0
0.1	1.69	0.263	1.61	1.11	1.83	0.125	1.33	0
0.2	1.68	0.265	1.38	0.945	1.88	0.121	1.14	0
0.3	1.67	0.268	1.18	0.814	1.91	0.118	0.920	0
0.4	1.66	0.271	1.01	0.757	1.94	0.120	0.801	0
0.5	1.66	0.273	0.865	0.728	1.96	0.123	0.679	0
0.6	1.66	0.277	0.704	0.701	1.98	0.130	0.535	0
0.7	1.66	0.283	0.580	0.682	2.00	0.134	0.378	0
0.8	1.68	0.298	0.457	0.669	2.03	0.139	0.279	0
0.9	1.74	0.331	0.359	0.658	2.09	0.154	0.190	0
1.0	1.93	0.437	0.255	0.647	2.28	0.224	0.131	0
$z = 5, \varphi = 180^\circ$								
0	1.76	0.189	1.62	0				
0.1	1.90	0.188	1.51	0				
0.2	1.98	0.186	1.33	0				
0.3	1.96	0.181	1.11	0				
0.4	2.01	0.180	0.952	0				
0.5	2.02	0.180	0.782	0				
0.6	2.05	0.183	0.662	0				
0.7	2.16	0.187	0.536	0				
0.8	2.30	0.201	0.428	0				
0.9	2.48	0.277	0.332	0				
1.0	2.79	0.405	0.236	0				
$z = 10, \varphi = 0^\circ$								
0	1.76	0.498	2.14	0				
0.1	1.66	0.500	1.68	0				
0.2	1.55	0.500	1.27	0				
0.3	1.46	0.498	1.05	0				
0.4	1.39	0.492	0.801	0				
0.5	1.31	0.483	0.555	0				
0.6	1.23	0.473	0.406	0				
0.7	1.16	0.461	0.331	0				
0.8	1.09	0.441	0.269	0				
0.9	1.03	0.423	0.216	0				
1.0	1.00	0.415	0.242	0				

Table 73

 $M_\infty = 6, \gamma = 1.4, \theta_b = 10^\circ, \alpha = 10^\circ$ 

$\lambda$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$
$z = 5, \varphi = 0^\circ$								
0	1.76	1.18	3.15	0	1.76	0.443	2.38	3.98
0.1	1.54	1.19	2.57	0	1.69	0.471	1.68	2.51
0.2	1.38	1.18	2.13	0	1.59	0.491	1.33	1.81
0.3	1.23	1.17	1.77	0	1.50	0.499	1.11	1.55
0.4	1.09	1.15	1.53	0	1.44	0.511	1.03	1.47
0.5	0.980	1.13	1.39	0	1.38	0.518	0.988	1.42
0.6	0.865	1.09	1.33	0	1.33	0.523	0.976	1.39
0.7	0.756	1.07	1.27	0	1.32	0.528	0.971	1.37
0.8	0.667	1.03	1.25	0	1.31	0.536	0.966	1.36
0.9	0.579	1.01	1.24	0	1.30	0.549	0.958	1.35
1.0	0.502	0.983	1.23	0	1.29	0.559	0.964	1.34
$z = 5, \varphi = 90^\circ$								
0	1.76	0.446	2.38	2.96	1.76	0.233	1.98	0
0.1	1.71	0.461	2.11	2.34	2.01	0.231	1.83	0
0.2	1.64	0.481	1.83	1.96	2.08	0.229	1.63	0
0.3	1.61	0.496	1.58	1.71	2.11	0.228	1.31	0
0.4	1.51	0.511	1.36	1.56	2.14	0.231	1.08	0
0.5	1.51	0.526	1.21	1.47	2.18	0.234	0.896	0
0.6	1.51	0.544	1.13	1.43	2.23	0.244	0.812	0
0.7	1.50	0.562	1.08	1.40	2.28	0.267	0.802	0
0.8	1.49	0.584	1.05	1.38	2.44	0.313	0.824	0
0.9	1.58	0.638	1.05	1.36	2.68	0.383	0.861	0
1.0	1.72	0.723	1.07	1.34	2.91	0.465	0.901	0
$z = 5, \varphi = 180^\circ$								
0	1.76	0.265	2.06	0				
0.1	2.00	0.256	1.90	0				
0.2	2.12	0.257	1.74	0				
0.3	2.21	0.260	1.56	0				
0.4	2.27	0.268	1.33	0				
0.5	2.32	0.271	1.12	0				
0.6	2.39	0.287	1.01	0				
0.7	2.58	0.328	0.965	0				
0.8	2.86	0.411	0.960	0				
0.9	3.16	0.520	0.983	0				
1.0	3.43	0.647	1.02	0				
$z = 10, \varphi = 0^\circ$								
0	1.76	1.37	3.29	0				
0.1	1.60	1.39	1.89	0				
0.2	1.51	1.38	1.47	0				
0.3	1.41	1.37	1.38	0				
0.4	1.32	1.35	1.34	0				
0.5	1.23	1.32	1.33	0				
0.6	1.15	1.29	1.33	0				
0.7	1.05	1.26	1.32	0				
0.8	0.968	1.22	1.32	0				
0.9	0.868	1.18	1.32	0				
1.0	0.744	1.12	1.31	0				

Table 74.

 $M_{\infty} = 6, \gamma = 1.4, \theta_b = 10^\circ, \alpha = 5^\circ$ 

$\lambda$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	
$z = 5, \varphi = 0^\circ$						$z = 10, \varphi = 90^\circ$						$z = 16, \varphi = 180^\circ$	
0	1.76	0.710	2.73	0	1.76	0.452	2.39	1.87	1.76	0.303	2.13	0	
0.1	1.56	0.710	2.32	0	1.64	0.459	1.84	1.24	1.70	0.301	1.70	0	
0.2	1.39	0.708	1.96	0	1.52	0.463	1.42	0.918	1.65	0.295	1.22	0	
0.3	1.26	0.704	1.65	0	1.40	0.462	1.14	0.799	1.59	0.292	0.980	0	
0.4	1.15	0.698	1.42	0	1.30	0.456	1.01	0.749	1.54	0.287	0.851	0	
0.5	1.06	0.690	1.26	0	1.23	0.448	0.958	0.721	1.50	0.286	0.811	0	
0.6	0.980	0.683	1.16	0	1.17	0.448	0.938	0.707	1.48	0.292	0.795	0	
0.7	0.920	0.676	1.13	0	1.14	0.452	0.924	0.694	1.46	0.298	0.792	0	
0.8	0.860	0.677	1.09	0	1.12	0.458	0.915	0.686	1.49	0.312	0.802	0	
0.9	0.854	0.696	1.08	0	1.13	0.473	0.918	0.679	1.61	0.348	0.825	0	
1.0	0.942	0.758	1.09	0	1.22	0.514	0.934	0.671	1.75	0.395	0.853	0	
$z = 5, \varphi = 90^\circ$						$z = 10, \varphi = 180^\circ$							
0	1.76	0.454	2.39	1.45	1.76	0.297	2.12	0					
0.1	1.64	0.458	2.11	1.18	1.72	0.293	1.83	0					
0.2	1.56	0.463	1.81	0.978	1.69	0.292	1.50	0					
0.3	1.49	0.466	1.58	0.861	1.65	0.294	1.21	0					
0.4	1.46	0.476	1.36	0.781	1.62	0.297	0.999	0					
0.5	1.42	0.486	1.20	0.743	1.60	0.304	0.900	0					
0.6	1.39	0.496	1.10	0.722	1.58	0.312	0.859	0					
0.7	1.38	0.514	1.04	0.704	1.58	0.327	0.840	0					
0.8	1.40	0.549	1.03	0.692	1.68	0.355	0.853	0					
0.9	1.56	0.614	1.04	0.678	1.85	0.412	0.880	0					
1.0	1.72	0.710	1.06	0.666	2.03	0.481	0.912	0					
$z = 5, \varphi = 180^\circ$						$z = 16, \varphi = 0^\circ$							
0	1.76	0.326	2.19	0	1.76	0.882	2.89	0					
0.1	1.76	0.326	1.99	0	1.62	0.888	1.47	0					
0.2	1.76	0.326	1.77	0	1.54	0.883	1.15	0					
0.3	1.76	0.328	1.55	0	1.43	0.872	1.10	0					
0.4	1.76	0.332	1.36	0	1.34	0.855	1.09	0					
0.5	1.77	0.340	1.18	0	1.25	0.839	1.09	0					
0.6	1.80	0.354	1.05	0	1.16	0.812	1.08	0					
0.7	1.88	0.388	0.996	0	1.06	0.785	1.07	0					
0.8	2.09	0.466	0.987	0	0.950	0.760	1.06	0					
0.9	2.33	0.560	1.00	0	0.850	0.709	1.04	0					
1.0	2.55	0.676	1.04	0	0.704	0.652	1.02	0					
$z = 10, \varphi = 0^\circ$						$z = 16, \varphi = 90^\circ$							
0	1.76	0.807	2.83	0	1.76	0.482	2.43	2.30					
0.1	1.58	0.808	1.94	0	1.62	0.485	1.46	1.09					
0.2	1.44	0.804	1.46	0	1.52	0.488	1.08	0.844					
0.3	1.32	0.792	1.24	0	1.42	0.486	0.945	0.763					
0.4	1.21	0.772	1.13	0	1.33	0.481	0.915	0.733					
0.5	1.09	0.749	1.08	0	1.23	0.472	0.900	0.717					
0.6	0.983	0.713	1.06	0	1.15	0.457	0.900	0.707					
0.7	0.867	0.686	1.02	0	1.07	0.444	0.899	0.699					
0.8	0.760	0.656	1.02	0	1.02	0.434	0.888	0.692					
0.9	0.679	0.629	1.01	0	0.983	0.429	0.879	0.686					
1.0	0.627	0.620	1.00	0	1.00	0.442	0.886	0.682					

Table 75.

 $M_\infty = 6, \gamma = 1.4, \theta_b = 5^\circ, \alpha = 5^\circ$ 

$\lambda$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$
$z = 5, \varphi = 0^\circ$								
0	0.875	0.428	2.35	0	0.875	0.248	2.01	1.84
0.1	0.665	0.430	2.06	0	0.772	0.255	1.64	1.32
0.2	0.537	0.434	1.80	0	0.715	0.263	1.36	1.03
0.3	0.471	0.439	1.54	0	0.678	0.275	1.15	0.880
0.4	0.432	0.446	1.34	0	0.661	0.287	0.999	0.806
0.5	0.407	0.454	1.19	0	0.650	0.299	0.899	0.775
0.6	0.391	0.465	1.09	0	0.680	0.314	0.865	0.752
0.7	0.413	0.480	1.04	0	0.732	0.330	0.851	0.731
0.8	0.522	0.535	1.03	0	0.835	0.367	0.862	0.711
0.9	0.689	0.620	1.04	0	0.989	0.424	0.888	0.690
1.0	0.868	0.724	1.06	0	1.15	0.493	0.920	0.672
$z = 5, \varphi = 90^\circ$								
0	0.875	0.293	2.11	1.50	0.875	0.212	1.93	0
0.1	0.867	0.300	1.93	1.23	1.05	0.209	1.77	0
0.2	0.843	0.307	1.73	1.03	1.14	0.207	1.55	0
0.3	0.820	0.314	1.51	0.915	1.19	0.206	1.28	0
0.4	0.810	0.323	1.34	0.837	1.22	0.206	1.03	0
0.5	0.806	0.333	1.16	0.784	1.22	0.212	0.893	0
0.6	0.899	0.354	1.05	0.751	1.20	0.229	0.817	0
0.7	1.02	0.397	1.00	0.726	1.34	0.260	0.807	0
0.8	1.23	0.473	1.00	0.704	1.55	0.315	0.829	0
0.9	1.46	0.575	1.02	0.683	1.78	0.389	0.866	0
1.0	1.68	0.697	1.05	0.667	2.01	0.475	0.908	0
$z = 5, \varphi = 180^\circ$								
0	0.875	0.252	2.02	0				
0.1	1.05	0.255	1.87	0				
0.2	1.15	0.257	1.72	0				
0.3	1.22	0.258	1.54	0				
0.4	1.29	0.258	1.33	0				
0.5	1.36	0.257	1.14	0				
0.6	1.48	0.272	1.03	0				
0.7	1.68	0.330	0.982	0				
0.8	1.96	0.417	0.974	0				
0.9	2.26	0.531	0.995	0				
1.0	2.53	0.667	1.03	0				
$z = 10, \varphi = 0^\circ$								
0	0.875	0.412	2.33	0				
0.1	0.628	0.413	1.71	0				
0.2	0.448	0.412	1.32	0				
0.3	0.342	0.408	1.08	0				
0.4	0.269	0.403	0.971	0				
0.5	0.215	0.400	0.927	0				
0.6	0.177	0.408	0.910	0				
0.7	0.161	0.416	0.900	0				
0.8	0.168	0.428	0.900	0				
0.9	0.237	0.462	0.912	0				
1.0	0.346	0.512	0.933	0				

Table 76

 $M_\infty = 4, \gamma = 1.4, \theta_b = 15^\circ, \alpha = 5^\circ$ 

$\lambda$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$
$z = 5, \varphi = 0^\circ$												
0	2.67	1.56	3.93	0	2.67	1.31	3.73	1.74	2.67	0.876	3.32	0
0.1	2.46	1.57	3.32	0	2.51	1.32	2.89	1.19	2.55	0.863	2.47	0
0.2	2.26	1.56	2.85	0	2.36	1.31	2.36	0.879	2.44	0.854	1.97	0
0.3	2.08	1.54	2.55	0	2.22	1.30	2.14	0.741	2.36	0.846	1.81	0
0.4	1.92	1.51	2.40	0	2.09	1.28	2.10	0.711	2.30	0.840	1.80	0
0.5	1.77	1.48	2.33	0	1.97	1.26	2.13	0.732	2.21	0.830	1.87	0
0.6	1.63	1.43	2.29	0	1.87	1.23	2.17	0.748	2.08	0.803	1.90	0
0.7	1.50	1.39	2.25	0	1.74	1.19	2.13	0.723	1.93	0.760	1.85	0
0.8	1.36	1.35	2.21	0	1.63	1.16	2.07	0.688	1.74	0.702	1.76	0
0.9	1.21	1.28	2.17	0	1.48	1.10	2.02	0.679	1.63	0.669	1.74	0
1.0	1.08	1.23	2.15	0	1.32	1.03	2.02	0.687	1.57	0.657	1.74	0
$z = 5, \varphi = 72^\circ$												
0	2.67	1.21	3.65	1.43	2.67	0.829	3.27	0				
0.1	2.46	1.21	3.12	1.13	2.53	0.820	2.63	0				
0.2	2.27	1.20	2.69	0.912	2.39	0.809	2.16	0				
0.3	2.12	1.20	2.41	0.790	2.29	0.799	1.93	0				
0.4	1.99	1.19	2.26	0.740	2.18	0.787	1.86	0				
0.5	1.86	1.17	2.19	0.724	2.07	0.770	1.85	0				
0.6	1.73	1.14	2.15	0.717	1.92	0.732	1.84	0				
0.7	1.57	1.09	2.10	0.701	1.77	0.693	1.80	0				
0.8	1.45	1.06	2.05	0.681	1.73	0.690	1.78	0				
0.9	1.42	1.06	2.05	0.668	1.81	0.729	1.79	0				
1.0	1.44	1.10	2.06	0.668	1.95	0.795	1.85	0				
$z = 5, \varphi = 180^\circ$												
0	2.67	0.786	3.22	0	2.67	1.72	4.03	0				
0.1	2.56	0.786	2.83	0	2.54	1.72	2.92	0				
0.2	2.44	0.784	2.48	0	2.41	1.71	2.53	0				
0.3	2.30	0.773	2.21	0	2.28	1.71	2.26	0				
0.4	2.18	0.763	2.04	0	2.17	1.68	2.28	0				
0.5	2.05	0.740	1.94	0	2.05	1.66	2.38	0				
0.6	1.96	0.726	1.88	0	1.95	1.63	2.44	0				
0.7	1.93	0.751	1.88	0	1.84	1.61	2.41	0				
0.8	2.09	0.812	1.90	0	1.74	1.57	2.33	0				
0.9	2.25	0.902	1.95	0	1.63	1.53	2.28	0				
1.0	2.46	1.01	2.00	0	1.52	1.49	2.31	0				
$z = 10, \varphi = 0^\circ$												
0	2.67	1.69	4.02	0	2.67	1.35	3.77	1.87				
0.1	2.51	1.70	3.06	0	2.53	1.36	2.71	1.14				
0.2	2.36	1.69	2.50	0	2.41	1.35	2.30	0.893				
0.3	2.22	1.67	2.28	0	2.30	1.35	2.07	0.711				
0.4	2.09	1.65	2.25	0	2.19	1.33	2.08	0.720				
0.5	1.97	1.62	2.31	0	2.10	1.32	2.18	0.780				
0.6	1.85	1.58	2.36	0	2.01	1.30	2.23	0.815				
0.7	1.74	1.55	2.34	0	1.92	1.28	2.21	0.795				
0.8	1.61	1.50	2.27	0	1.82	1.26	2.13	0.750				
0.9	1.47	1.44	2.23	0	1.73	1.23	2.09	0.726				
1.0	1.31	1.36	2.23	0	1.63	1.19	2.12	0.754				
$z = 22, \varphi = 72^\circ$												
0	2.67	1.69	4.02	0	2.67	1.35	3.77	1.87				
0.1	2.51	1.70	3.06	0	2.53	1.36	2.71	1.14				
0.2	2.36	1.69	2.50	0	2.41	1.35	2.30	0.893				
0.3	2.22	1.67	2.28	0	2.30	1.35	2.07	0.711				
0.4	2.09	1.65	2.25	0	2.19	1.33	2.08	0.720				
0.5	1.97	1.62	2.31	0	2.10	1.32	2.18	0.780				
0.6	1.85	1.58	2.36	0	2.01	1.30	2.23	0.815				
0.7	1.74	1.55	2.34	0	1.92	1.28	2.21	0.795				
0.8	1.61	1.50	2.27	0	1.82	1.26	2.13	0.750				
0.9	1.47	1.44	2.23	0	1.73	1.23	2.09	0.726				
1.0	1.31	1.36	2.23	0	1.63	1.19	2.12	0.754				

Table 77

 $M_\infty = 4, \gamma = 1.4, \theta_b = 10^\circ, \alpha = 5^\circ$ 

$\lambda$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$	$\eta \cdot 10$	$p \cdot 10$	$i \cdot 10$	$\zeta \cdot 10$
$z = 5, \varphi = 0^\circ$												
0	1.76	1.03	3.49	0	1.76	0.745	3.17	1.84	1.76	0.624	3.021	0
0.1	1.49	1.02	2.98	0	1.57	0.751	2.51	1.31	1.70	0.606	2.24	0
0.2	1.27	1.01	2.57	0	1.40	0.752	2.07	0.990	1.61	0.600	1.76	0
0.3	1.11	1.01	2.30	0	1.28	0.752	1.87	0.835	1.57	0.593	1.63	0
0.4	0.983	1.00	2.16	0	1.17	0.744	1.82	0.785	1.49	0.587	1.62	0
0.5	0.881	0.992	2.10	0	1.08	0.733	1.83	0.792	1.42	0.574	1.67	0
0.6	0.754	0.961	2.05	0	0.990	0.715	1.84	0.799	1.30	0.550	1.70	0
0.7	0.637	0.931	2.01	0	0.903	0.697	1.81	0.775	1.19	0.520	1.66	0
0.8	0.606	0.942	1.99	0	0.890	0.708	1.79	0.737	1.16	0.517	1.62	0
0.9	0.676	0.999	2.01	0	0.965	0.751	1.80	0.712	1.24	0.545	1.62	0
1.0	0.812	1.08	2.05	0	1.09	0.813	1.86	0.715	1.39	0.594	1.69	0
$z = 5, \varphi = 90^\circ$												
0	1.76	0.726	3.15	1.50	1.76	0.577	2.95	0				
0.1	1.60	0.735	2.76	1.21	1.73	0.576	2.48	0				
0.2	1.46	0.743	2.43	1.00	1.66	0.575	2.08	0				
0.3	1.34	0.744	2.18	0.870	1.56	0.564	1.83	0				
0.4	1.25	0.747	2.04	0.812	1.47	0.555	1.72	0				
0.5	1.16	0.742	1.95	0.789	1.37	0.539	1.68	0				
0.6	1.11	0.739	1.90	0.772	1.33	0.537	1.58	0				
0.7	1.14	0.768	1.90	0.750	1.40	0.564	1.69	0				
0.8	1.24	0.832	1.92	0.726	1.54	0.618	1.73	0				
0.9	1.40	0.927	1.96	0.708	1.72	0.694	1.78	0				
1.0	1.61	1.04	2.02	0.702	1.92	0.785	1.84	0				
$z = 5, \varphi = 180^\circ$												
0	1.76	0.566	2.93	0	1.76	1.17	3.61	0				
0.1	1.75	0.571	2.64	0	1.60	1.18	2.59	0				
0.2	1.70	0.571	2.36	0	1.46	1.17	2.25	0				
0.3	1.64	0.567	2.12	0	1.32	1.16	1.95	0				
0.4	1.52	0.549	1.93	0	1.21	1.14	1.98	0				
0.5	1.46	0.545	1.81	0	1.09	1.12	2.04	0				
0.6	1.54	0.582	1.78	0	0.993	1.09	2.09	0				
0.7	1.73	0.656	1.81	0	0.891	1.06	2.06	0				
0.8	1.97	0.758	1.87	0	0.780	1.03	1.99	0				
0.9	2.21	0.877	1.93	0	0.678	1.00	1.95	0				
1.0	2.44	1.00	2.00	0	0.564	0.963	1.97	0				
$z = 10, \varphi = 0^\circ$												
0	1.76	1.10	3.55	0	1.76	0.793	3.23	2.24				
0.1	1.53	1.10	2.74	0	1.59	0.797	2.32	1.39				
0.2	1.33	1.09	2.24	0	1.46	0.799	1.98	1.09				
0.3	1.17	1.08	2.03	0	1.35	0.797	1.75	0.832				
0.4	1.03	1.05	1.98	0	1.26	0.791	1.76	0.809				
0.5	0.886	1.02	2.01	0	1.18	0.781	1.84	0.841				
0.6	0.737	0.974	2.02	0	1.10	0.768	1.88	0.857				
0.7	0.597	0.932	1.98	0	1.01	0.748	1.84	0.820				
0.8	0.466	0.892	1.91	0	0.897	0.720	1.77	0.761				
0.9	0.389	0.873	1.88	0	0.764	0.680	1.72	0.729				
1.0	0.362	0.871	1.90	0	0.655	0.647	1.74	0.752				
$z = 10, \varphi = 90^\circ$												

$H = 30, V_\infty \approx 7500$   
 $\theta_b = 15^\circ, \alpha = 5^\circ$

Table 78

$z$	$\bar{C}_\tau \cdot 10$	$\bar{C}_N \cdot 10$	$\bar{C}_m \cdot 10$	$C'_\tau \cdot 10$	$C'_N \cdot 10$
1	0.594	0.335	0.272	0.644	0.106
2	0.778	0.489	0.342	0.548	0.119
3	0.867	0.638	0.449	0.554	0.152
4	0.934	0.792	0.569	0.585	0.186
5	0.994	0.953	0.698	0.623	0.222
6	1.05	1.11	0.830	0.660	0.251
7	1.10	1.26	0.941	0.679	0.260
8	1.14	1.37	1.02	0.686	0.258
9	1.18	1.45	1.07	0.687	0.250
10	1.20	1.50	1.10	0.697	0.243
11	1.23	1.54	1.11	0.689	0.238
12	1.25	1.57	1.12	0.692	0.235
13	1.26	1.59	1.13	0.697	0.234
14	1.28	1.61	1.14	0.701	0.232
15	1.29	1.62	1.14	0.705	0.231
16	1.30	1.63	1.14	0.709	0.230
18	1.32	1.64	1.14	0.709	0.223
20	1.34	1.64	1.14	0.713	0.220
22	1.35	1.64	1.13	0.715	0.216

$H = 30, V_\infty \approx 7500$   
 $\theta_b = 5^\circ, \alpha = 5^\circ$

Table 79

$z$	$\bar{C}_\tau \cdot 10$	$\bar{C}_N \cdot 10$	$\bar{C}_m \cdot 10$	$C'_\tau \cdot 10$	$C'_N \cdot 10$
0.5	0.077	0.132	0.091	0.417	0.0607
1.0	0.131	0.219	0.124	0.345	0.0477
1.5	0.169	0.277	0.144	0.294	0.0397
2.0	0.197	0.319	0.157	0.257	0.0346
2.5	0.217	0.349	0.167	0.230	0.0313
3.5	0.244	0.393	0.184	0.196	0.0293
4.5	0.260	0.426	0.201	0.177	0.0278
5.5	0.269	0.451	0.214	0.162	0.0263
6.5	0.273	0.467	0.223	0.150	0.0251
7.5	0.275	0.477	0.229	0.140	0.0243
8.5	0.275	0.484	0.234	0.132	0.0239
9.5	0.273	0.490	0.239	0.125	0.0241
10.5	0.270	0.496	0.246	0.119	0.0248
12.5	0.264	0.510	0.262	0.111	0.0263
14.5	0.257	0.528	0.281	0.106	0.0287
16.5	0.250	0.550	0.304	0.103	0.0316
18.5	0.245	0.577	0.331	0.103	0.0350
20.5	0.240	0.510	0.362	0.103	0.0390
22.5	0.237	0.648	0.397	0.105	0.0435
24.5	0.234	0.692	0.436	0.107	0.0483
26.5	0.233	0.740	0.478	0.111	0.0529

$H = 30, V_\infty = 5000$   
 $\theta_b = 15^\circ, \alpha = 5^\circ$

Table 80

$z$	$\bar{C}_\tau \cdot 10$	$\bar{C}_N \cdot 10$	$\bar{C}_m \cdot 10$	$C'_\tau \cdot 10$	$C'_N \cdot 10$
1	0.613	0.345	0.283	0.701	0.111
2	0.840	0.514	0.363	0.623	0.120
3	0.942	0.639	0.441	0.590	0.139
4	1.00	0.770	0.542	0.598	0.173
5	1.04	0.911	0.656	0.622	0.204
6	1.09	1.05	0.769	0.652	0.229
7	1.13	1.18	0.874	0.678	0.248
8	1.17	1.30	0.963	0.596	0.256
9	1.21	1.39	1.03	0.704	0.256
10	1.23	1.46	1.07	0.709	0.252
11	1.26	1.51	1.10	0.712	0.247
12	1.28	1.55	1.12	0.714	0.243
13	1.30	1.58	1.14	0.717	0.239
14	1.31	1.60	1.15	0.719	0.237
15	1.32	1.62	1.15	0.722	0.235
16	1.34	1.63	1.16	0.726	0.233
18	1.36	1.65	1.16	0.728	0.227
20	1.37	1.65	1.16	0.733	0.225
22	1.39	1.65	1.15	0.737	0.222
24	1.40	1.65	1.15	0.739	0.220

$H = 30, V_\infty = 5000$   
 $\theta_b = 10^\circ, \alpha = 5^\circ$

Table 81

$z$	$\bar{C}_\tau \cdot 10$	$\bar{C}_N \cdot 10$	$\bar{C}_m \cdot 10$	$C'_\tau \cdot 10$	$C'_N \cdot 10$
1	0.328	0.279	0.193	0.509	0.0761
2	0.475	0.410	0.246	0.424	0.0685
3	0.543	0.484	0.280	0.368	0.0643
4	0.574	0.534	0.306	0.331	0.0662
5	0.585	0.580	0.338	0.312	0.0731
6	0.591	0.628	0.376	0.303	0.0802
7	0.592	0.677	0.417	0.300	0.0879
8	0.593	0.729	0.460	0.301	0.0962
9	0.595	0.784	0.505	0.305	0.104
10	0.598	0.840	0.552	0.311	0.113
12	0.606	0.959	0.651	0.326	0.132
14	0.616	1.08	0.751	0.342	0.147
16	0.632	1.19	0.842	0.352	0.156
18	0.644	1.29	0.914	0.356	0.159
20	0.655	1.37	0.968	0.357	0.159
22	0.663	1.43	1.00	0.356	0.157

$H = 30, V_\infty = 5000$   
 $\theta_b = 5^\circ, \alpha = 5^\circ$

Table 82

$z$	$\bar{C}_\tau$	$\bar{C}_N$	$\bar{C}_m$	$C'_\tau$	$C'_N$
1	0.134	0.229	0.132	0.376	0.0534
2	0.212	0.350	0.179	0.306	0.0417
4	0.286	0.455	0.215	0.221	0.0285
6	0.309	0.488	0.229	0.175	0.0261
8	0.312	0.512	0.243	0.151	0.0271
10	0.307	0.532	0.262	0.137	0.0276
12	0.300	0.550	0.281	0.127	0.0289
14	0.293	0.570	0.302	0.122	0.0307
16	0.285	0.592	0.325	0.118	0.0331
20	0.273	0.646	0.377	0.116	0.0387
24	0.264	0.715	0.441	0.118	0.0463
28	0.260	0.800	0.515	0.123	0.0545
32	0.258	0.894	0.595	0.128	0.0621
36	0.259	0.991	0.675	0.131	0.0679
40	0.260	1.08	0.746	0.132	0.0715
44	0.260	1.16	0.807	0.129	0.0728

Table 83

$M_\infty = 6, \gamma = 1.4, \theta_b = 10^\circ, \alpha = 10^\circ$

$z$	$\bar{C}_\tau \cdot 10$	$\bar{C}_N \cdot 10$	$\bar{C}_m \cdot 10$
0.5	0.256	0.433	0.393
1.0	0.437	0.732	0.515
1.5	0.565	0.943	0.601
2	0.657	1.09	0.669
3	0.778	1.33	0.793
4	0.854	1.51	0.907
5	0.908	1.68	1.02
6	0.951	1.84	1.14
7	0.987	1.99	1.25
8	1.01	2.13	1.36
9	1.04	2.26	1.46
10	1.07	2.38	1.55
12	1.10	2.56	1.69
14	1.13	2.70	1.79
16	1.15	2.81	1.86
18	1.17	2.90	1.92
20	1.18	2.96	1.97

Table 84

$M_\infty = 6, \gamma = 1.4, \theta_b = 10^\circ, \alpha = 5^\circ$

$z$	$\bar{C}_\tau \cdot 10$	$\bar{C}_N \cdot 10$	$\bar{C}_m \cdot 10$
0.5	0.242	0.213	0.193
1.0	0.413	0.358	0.251
1.5	0.532	0.458	0.296
2	0.617	0.529	0.319
3	0.722	0.627	0.367
4	0.781	0.699	0.408
5	0.817	0.761	0.451
6	0.842	0.820	0.494
7	0.861	0.877	0.539
8	0.875	0.932	0.583
9	0.891	0.985	0.626
10	0.904	1.03	0.668
12	0.928	1.13	0.748
14	0.950	1.21	0.815
16	0.971	1.29	0.871
18	0.989	1.35	0.917
20	1.00	1.40	0.955
22	1.01	1.45	0.986
24	1.03	1.48	1.01

$M_\infty = 4, \gamma = 1.4$   
 $\theta_b = 15^\circ, \alpha = 5^\circ$

Table 85

$z$	$\bar{C}_\tau \cdot 10$	$\bar{C}_N \cdot 10$	$\bar{C}_m \cdot 10$	$\bar{C}'_\tau \cdot 10$	$\bar{C}'_N \cdot 10$
0.5	0.571	0.292	0.327	1.23	0.168
1.0	0.947	0.483	0.400	1.17	0.160
1.5	1.19	0.614	0.455	1.13	0.158
2	1.37	0.736	0.502	1.11	0.161
3	1.60	0.860	0.590	1.09	0.171
4	1.75	0.975	0.665	1.11	0.184
5	1.86	1.07	0.734	1.13	0.195
6	1.94	1.15	0.796	1.15	0.204
7	2.01	1.22	0.849	1.17	0.210
8	2.07	1.28	0.894	1.18	0.215
9	2.12	1.33	0.931	1.20	0.217
10	2.16	1.37	0.961	1.21	0.218
14	2.28	1.47	1.03	1.23	0.215
18	2.35	1.51	1.05	1.24	0.214
22	2.39	1.54	1.07	1.25	0.210
26	2.42	1.55	1.08	1.25	0.212
30	2.44	1.56	1.08	1.26	0.211
34	2.46	1.56	1.09	1.26	0.211

$M_\infty = 4, \gamma = 1.4$   
 $\theta_b = 10^\circ, \alpha = 5^\circ$

Table 86

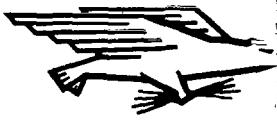
$z$	$\bar{C}_\tau \cdot 10$	$\bar{C}_N \cdot 10$	$\bar{C}_m \cdot 10$	$\bar{C}'_\tau \cdot 10$	$\bar{C}'_N \cdot 10$
0.5	0.296	0.242	0.224	0.926	0.131
1.0	0.517	0.416	0.294	0.881	0.120
1.5	0.681	0.540	0.347	0.842	0.114
2	0.905	0.633	0.389	0.813	0.111
3	0.976	0.768	0.459	0.778	0.109
4	1.08	0.865	0.514	0.765	0.112
5	1.16	0.944	0.565	0.763	0.117
6	1.22	1.01	0.613	0.766	0.121
7	1.27	1.07	0.657	0.772	0.126
8	1.31	1.12	0.698	0.779	0.129
10	1.37	1.21	0.768	0.792	0.132
12	1.42	1.28	0.820	0.804	0.136
14	1.46	1.33	0.882	0.814	0.138
18	1.51	1.40	0.917	0.825	0.138
22	1.55	1.44	0.952	0.833	0.139
26	1.58	1.48	0.978	0.838	0.140
30	1.60	1.50	0.999	0.842	0.141
34	1.62	1.52	1.01	0.845	0.142
38	1.63	1.54	1.02	0.847	0.143

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